

# Green

# Thumb

# N

# E

# W

# S



Denver Botanic Gardens

January 1985

Number 85-1

## Special Lectures, Classes, and Films Accompany Smithsonian Exhibition

With great pride and much excitement, Denver Botanic Gardens presents the Smithsonian Institution's traveling exhibit, "Native Harvests: Plants in American Indian Life," from Saturday, January 19 to Sunday, March 3, in John C. Mitchell II Hall.

The show focuses on plants used by the North American Indians for food, medicine, cosmetics, containers, tools, and toys and contains more than 130 items. These objects were borrowed from the American Museum of Natural History and the Brooklyn Museum in New York, the Bowers Museum in Santa Ana, California, the Chandler Institute in Mission, South Dakota, the Tantaquidgeon Indian Museum in Uncasville, Connecticut, as well as the Smithsonian Institution in Washington, D.C.

More than 30 archival photographs enhance the show along with 20 color enlargements illustrating the peoples, environments, and important plants, and capturing the spirit of Indians all over North America.

The exhibition is divided into distinct geographic regions, and in each there is information on tribal diversity, food, lifeways, and technologies. Range maps on major panels delineate the Northeast, the Southeast, the Southwest, the Plains, Plateau, Great Basin, and the Far West. Objects in the show represent over 55 different tribes, and the maps place many more.

"Herbal Traditions: Medicinal Plants in American Indian Life" is a booklet that accompanies the exhibit and describes 16 native medicinal plants. This publication has been very well received and has

already won national awards of distinction from the American Association of Museums and the Art Directors' Show. Author and illustrator Barrie Kavasch introduces it by saying that "people's uses of their floral environments are deeply woven into their cultural fabric." Learn about ginseng, American hellebore, cotton, Indian hemp, and tobacco as well as 10 others. The beautifully-illustrated booklets are \$2 each.

### Lectures

In conjunction with our showing of "Native Harvests: Plants in American Indian Life," distinguished ethnobotanist and lecturer Barrie Kavasch is coming to Denver. Co-sponsored by Denver

Botanic Gardens and the Denver Museum of Natural History, Ms. Kavasch will share her expertise from over ten years of research in special lectures and American Indian cooking classes.

Ms. Kavasch, the curator of the Smithsonian show, is an expert on plant uses by the North American Indians. She is the author and illustrator of six books including a cookbook of American Indian recipes, *Native Harvests*. Craig Claiborne of the *New York Times* has praised *Native Harvests* as "the most intelligent and brilliantly researched book on the food of the

*continued on page 2*

### Inside:

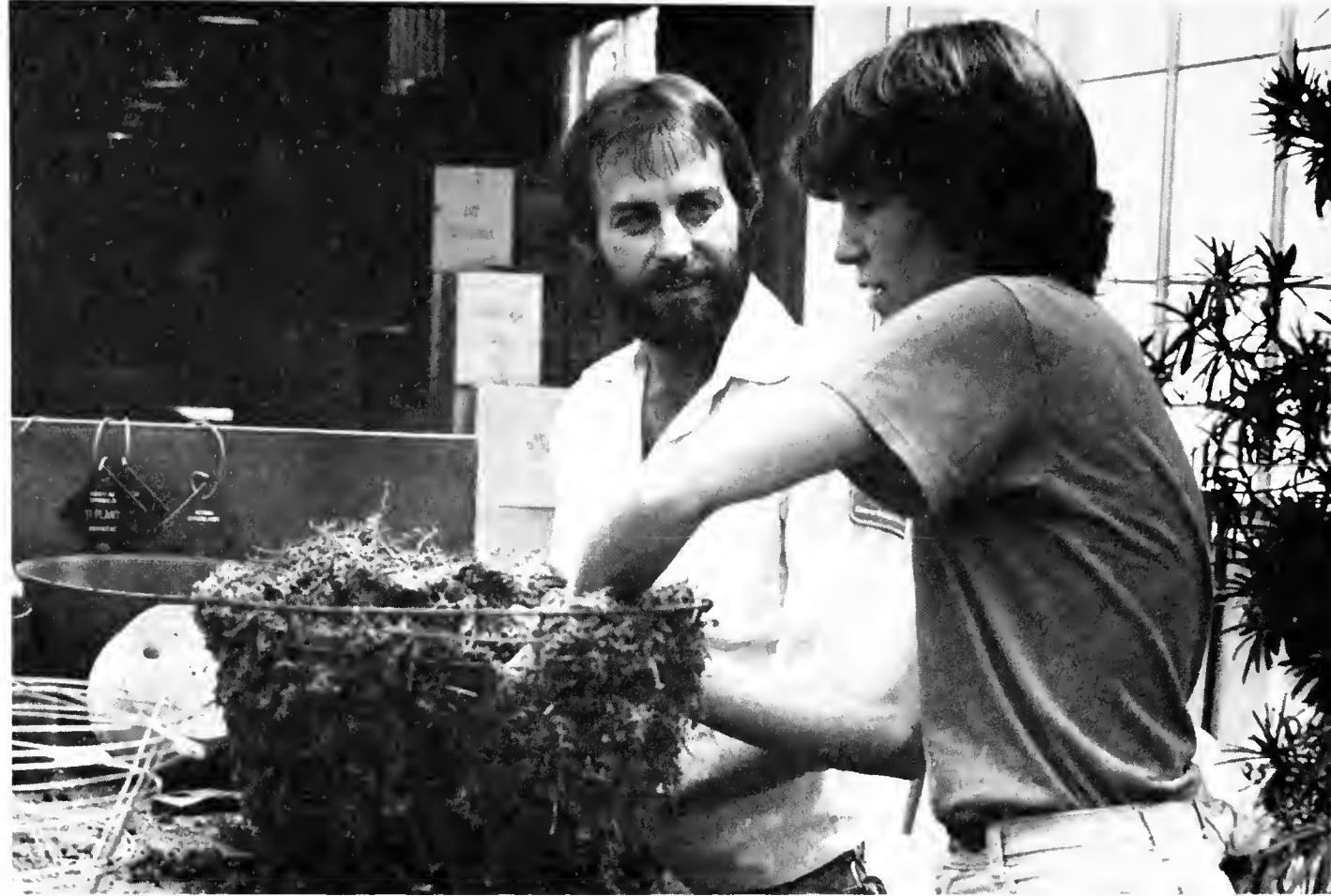
American Indian films and classes, page 3

Adult classes, pages 4-7

Classes for Kids, page 8



An Apache burden basket.



Gardener florist  
Gary Davis  
with 1984  
Intern Lynn  
Riedel.

## 1985 Internship Program Announced

Summer internships at Denver Botanic Gardens provide college students valuable learning opportunities in "applied horticulture." Last year's interns left with a new sense of direction and a feeling that they had just passed a "valuable stepping stone" toward completing their career goals.

This year interns can look forward to obtaining on-the-job experience by working with DBG's professional staff and volunteers. In this 10-week program students will be introduced to the daily operation of a public display garden.

Each intern will be involved in watering, weeding, planting, and pruning; seeding, transplanting, and propagating in the greenhouses; and maintaining the tropical and subtropical plant displays. Besides gaining experience in the plant areas, each student will work in the Helen Fowler Library, the Kathryn Kalmbach Herbarium, the Pauline A. and George R. Morrison Horticultural Demonstration Center, and the Education Department. Classes, field trips, lectures, and demonstrations will be provided throughout the summer to complete the learning experience.

A \$2000 taxable stipend will be paid each intern. All applicants must have completed their sophomore year in college with a G.P.A. of 2.5 or higher on a 4.0 scale. Completion of at least introductory botanical or horticultural coursework is necessary in order to be considered.

Application forms can be obtained by calling the Education Department, 575-3751, or by writing:

Education Director  
Denver Botanic Gardens  
909 York Street  
Denver, CO 80206.

Application materials are due March 1 and notification of appointment will be mailed by March 29.

## For Members Only: A Horticultural Workshop

Members of Denver Botanic Gardens can look forward to an exciting horticultural workshop on Saturday, March 9, 1985. Titled, "Special Plants for Special Places," the program features four knowledgeable horticulturists who will provide advice on specialty plantings.

Ornamental aquatic plants, old-fashioned or shrub roses, flowers for arranging, and container gardening will all be covered.

Scheduled for 9 a.m. to 2 p.m. in John C. Mitchell II Hall, "Special Plants for Special Places" is open to DBG members only. The registration fee is \$10.50 with a box lunch provided or \$5 for those who wish to bring their own lunch. Complete the Education Department registration form on page 7 to reserve your place.

## Education Department

### Deciduous Shade and Ornamental Trees for Denver

Tuesdays, February 19, 26, March 5, 12, 19

Classroom C 7:15 and 9:15 p.m.  
and

Field Trip on Saturday, March 23  
from 9 a.m. to noon  
(six sessions) DBG House

Due to this unique climate, very few trees are actually indigenous to the Denver area. It is not so much cold hardiness, but soil, moisture, humidity, and extreme fluctuations in temperatures that make it so difficult for trees to survive.

This class will acquaint students with a variety of plant material and will establish an understanding of their characteristics, natural history, culture, problems, and landscape value as an ornamental or shade tree.

Through the use of slides, students will observe each of approximately 100 species in all seasons, with an emphasis on winter characteristics. A field trip is included for a first-hand look at some of the species discussed in class.

**Instructor:** An experienced teacher, Jeffrey Frank studied horticulture at Pennsylvania State University and earned a master's degree in landscape architecture from the University of Virginia. He is presently in private practice in Denver.

**Fee:** \$45 members/\$49.50 non-members.

### Coniferous Trees for Denver

Thursday, February 21 from 7:15 to 9:15 p.m.

and

Field Trip on Saturday, February 23  
from 9 a.m. to noon  
(two sessions) DBG House

This class will acquaint students with coniferous trees (both deciduous and evergreen) that are hardy to the Denver area. The majority of these trees are indigenous to the Colorado Rockies, while others are from the Eastern United States and Western Europe.

Through the use of slides, students will observe approximately 20 species to establish an understanding of their distinguishing characteristics, natural history, culture, and landscape value.

**Instructor:** Jeffrey Frank.

**Fee:** \$13 members/\$14 non-members.

# CLASS

Winter  
1985  
Denver Botanic Gardens

## Tree Walk at Cheesman Park, Denver

**Saturday, February 9 10 a.m. to noon**

Cheesman Park consists of eighty acres of trees and lawns and lies immediately west of Denver Botanic Gardens. It was part of the original 160 acres purchased by the city of Denver in 1872 from the United States Government. Under the name of Mount Prospect or Prospect Hill, the area was used extensively for burials in the early days of Denver.

In 1890, the city began developing it into a park, a change approved by an Act of Congress, hence its original name, Congress Park. It has been known as Cheesman Park since 1907 when Mrs. Walter Cheesman built a magnificent Greek pavilion of Colorado marble there in 1907-1909.

Join us on a walk through this historic park to see the many kinds of trees, both deciduous and evergreen, native and introduced, that have been planted here since 1907.

**Leader:** Dr. William G. Gambill, Jr.

**Meet:** at 10 a.m. in the DBG parking lot.

**Fee:** \$3.50 members/\$4 non-members.

**Limit:** 18

## Tree Walk at Fairmount Cemetery, Denver

**Sunday, January 27  
1:30 to 3:30 p.m.**

During the summers of 1890 and 1891 over 4,000 trees including seven species of oak, sycamores, silver maples, Kentucky coffee trees, buckeyes, and several pines were all planted at Fairmount Cemetery. This is an opportunity to observe these as well as some more unusual trees such as scarlet oak and yellow buckeye. A walk through these mature, historic specimens will sharpen your identification skills.

**Leader:** Dr. William G. Gambill, Jr., Director Emeritus and Taxonomist at DBG, is a former botany and biology professor. His field trips and tree walks are very popular among our students.

**Meet:** at 1:30 p.m. just inside the entrance. Fairmount Cemetery is located at East Alameda and Quebec Streets in Denver.

**Fee:** \$5.50 members/\$6 non-members (includes \$3 for *Trail of Trees*, a 64-page illustrated tree guide to Fairmount Cemetery).

**Limit:** 18

## American Indian Films, Lectures and Classes

Special educational events such as films, lectures, and classes have been planned in conjunction with our showing of the Smithsonian Institution's exhibit "Native Harvests: Plants in American Indian Life."

Four American Indian films will be shown on Saturday and Sunday afternoons from Saturday, January 19 through Sunday, March 3, 1985.

Other programs include:

### An Introduction to Amerindian Ethnobotany

**Tuesday, February 12  
(one session lecture) 7 to 9 p.m.  
West Auditorium at Denver Museum of Natural History**

### American Indian Traditions in Herbalism

**Thursday, February 14  
(one session lecture) 7 to 9 p.m.  
West Auditorium at Denver Museum of Natural History**

### American Indian Cookery: the Original American Cuisine

**Section I: Tuesday and Wednesday, February 12 and 13**

**Section II: Thursday and Friday, February 14 and 15  
DBG 9 a.m. to noon**

Complete descriptions and program costs are found on pages 2-3.

## Perennial Pleasures

**Thursdays, February 7, 14, 21, 28  
March 7**

**(five sessions)  
Classroom C 7 to 9 p.m.**

With proper planning and planting, perennials can enhance any garden with long-term beauty and reduced maintenance. Discover the pleasures of perennial gardening in this five-week course that covers garden design, soil preparation, and cultivation as well as a multitude of suggested plants.

Perennials for specialized situations, such as shady areas, will also be discussed. There will be ample opportunity for questions.

**Instructor:** Andrew Pierce is a horticulturist and is assistant director of DBG. He is an avid grower of perennials and alpine plants.

**Fee:** \$40 members/\$44 non-members.

**Limit:** 18



## Deciduous Flowering Shrub and Ornamental Trees for Colorado

**Tuesdays, January 22, 29  
February 5, 12**

**(four sessions)**

**Classroom C 7:15 to 9:15 p.m.**

The emphasis of this course will be on identifying the landscape value of over 75 species of deciduous flowering shrubs and

ornamental trees which are hardy in the Denver area. Through the use of slides, students will observe the plant material while the instructor discusses their cultural requirements.

**Instructor:** Jeffrey Frank.

**Fee:** \$32 members/\$35 non-members.



## Education Department (cont.)

### Unusual and Exotic Houseplants

**Tuesdays, February 18, 25**  
from 7 to 9 p.m. and  
**Saturday, March 2 from 9 to**  
10:30 a.m.  
(three sessions) Classroom C

This class is for the gardener who wants to grow more exciting and unusual plants for the home, office, or greenhouse than are generally grown. Uncommon aroids, bromeliads, unusual cacti and other succulents as well as orchids suitable for windowsill culture, will be included. Learn what light, soil, temperature, and humidity requirements are needed to grow these plants well.

The course will conclude with a behind-the-scenes tour of the DBG greenhouses to observe some of our outstanding collections.

**Instructor:** Gary Davis is a gardener florist II at DBG whose responsibilities include the aroid and bromeliad collections. He has been an avid collector of bromeliads for 10 years.

**Fee:** \$20 members/\$22 non-members.

### Botany for Beginners

**Saturdays, February 2, 9, 16, 23**  
(four sessions)  
Classroom B 9:30 to 11:30 a.m.

This is a course for those who have no background in botany but wish to know more about plant



Kathryn Kalmbach  
Herbarium  
volunteer Peter Root.

parts and what they do. This is fundamental if you wish to learn how to identify plants. It will also help you to appreciate what plants require.

Some microscope work as well as greenhouse tours are included.

**Instructor:** Moras L. Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience.

**Fee:** \$32 members/\$40 non-members.

### Vegetable Gardening Basics

**Section I: Saturdays, February 2,**

9, 16, 23

9:30 to 11:30 a.m. or

**Section II: Wednesdays, February**

6, 13, 20, 27

7 to 9 p.m.

**DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue.**

Please indicate your section on the registration form.

Do you long for the taste of a fresh tomato or an ear of sweet corn eaten within minutes of picking? Learn how to grow your own fresh vegetables in time for planting this spring. This course will explain garden design, soil preparation, variety selection, maintenance, specific culture of common vegetables, and potential problems with pests and diseases to the novice gardener. Emphasis will be on intensive methods of cultivation for maximum production in small spaces.

**Instructor:** Lynn Thompson is a horticulturist who coordinates DBG's Community Vegetable Gardening Program. She has taught many classes on topics pertaining to home vegetable gardening in Colorado.

**Fee:** \$32 members/\$35 non-members.

### Beginning Botanical Illustration

**Tuesdays, February 5, 12, 19, 26**  
March 5, 12

(six sessions)

Classroom B 9:30 to 11:30 a.m.

Cold winter mornings are an ideal time to get acquainted with some of the many exotic tropical plants in our collections.

This introductory course will stress accurate drawing of flowers, roots, stems, and leaves. Fresh plant material will be used for each class and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first meeting.

**Instructor:** Angela Overy received her National Diploma of Design from London University, England and designed in London, New York, and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

**Fee:** \$48 members/\$53 non-members.

**Limit:** 20

### Woody Plant Identification

**Section I: Deciduous Trees and Shrubs**

**Mondays, February 4,**

11, 18, 25, March 4: 7 to

9 p.m. and Field Trip

on Sat., March 9 from 9

a.m. to noon or

**Section II: Evergreen Trees and Shrubs**

**Tuesdays, February 5,**

12, 19, 26, March 5: 7 to

9 p.m. and Field Trip

on Sat., March 9 from 1

to 4 p.m.

(six sessions) Classroom B  
Please indicate your section(s) on the registration form.

Learn to identify the many beautiful trees and shrubs that are grown in our region. In this introductory course in plant recognition, the serious student will learn to identify at least 100-150 species of deciduous trees and shrubs or evergreens.

Each class meeting consists of a lecture and a lab period to provide ample hands-on experience with the plant materials. The course will conclude with a field trip. Register for either section or both.

**Instructor:** Gayle Weinstein is a botanist horticulturist at DBG and oversees all aspects of the outdoor plant collections. She has taught horticultural subjects at Ohio State University and the Aurora Public Schools Technical Center.

**Fee:** \$45 members/\$49.50 non-members.

**Limit:** 18

### Watercolor and Mixed Media Painting

**Wednesdays, January 30,**  
February 6, 13, 20, 27,  
March 6, 13, 20

(eight sessions)

Classroom B 9:30 to 11:30 a.m.

Translate your vision of nature into exciting color! Wet-in-wet technique as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

The work of master painters such as Monet, Nolde, and Sargent will be shown in a slide presentation and visits to art galleries will be offered. No experience is necessary, only your interest in painting.

**Instructor:** Oksana Ross, Ph.D., studied at New York University and has 33 years of teaching experience. She was formerly on the faculty of the University of Colorado at

Denver, Metropolitan State College, and Colorado Women's College. Dr. Ross is a life member of the Arts Students League of New York where she studied under Hans Hofman, Will Barnett, Marion Cooper, and Edgar Whitney.

**Fee:** \$64 members/\$70 non-members.

**Limit:** 20

**Basketry Workshop:  
Heart-Shaped Basket**  
**Friday, February 8 (one session)**  
**Classroom A 9 a.m. to 4 p.m.**



*Heart-shaped  
basket by  
Robin Taylor  
Daugherty.*

Students in this class will create a traditional Appalachian heart-shaped basket. Using flat reed, they will weave an 8-inch by 5-inch basket using the square to round technique. This basket can be made with a relatively open or closed base and an optional handle. The heart-shaped basket is a distinctive valentine gift, either empty or filled with sweets or flowers.

No previous experience is necessary. Please bring a sack lunch, pruning shears, a sharp knife, and a towel to class.

**Instructor:** Robin Taylor Daugherty.

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials) **Limit:** 10

**Basketry Workshop: Spoke  
and Split Basket**  
**Saturday, February 16**  
**(one session)**  
**Classroom B 9 a.m. to 4 p.m.**

Learn how to make a traditional Appalachian spoke and split basket in this one-day workshop. In it, a series of flat splits radiate outward from the center of the basket's bottom. As it is worked upward, it can take a variety of shapes, all of them round. No previous experience is necessary and students can expect to complete a basket 11 inches across and 12 inches tall (includes handle). Please bring a sack lunch, pruning shears, a sharp knife, and a towel to class.

**Instructor:** Robin Taylor Daugherty is a fiber artist with considerable teaching experience: she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials).

**Limit:** 10

**Basketry Workshop:  
Market Basket**  
**Saturday, February 23**  
**(one session)**  
**Classroom B 9 a.m. to 4 p.m.**

Learn how to make a traditional New England market basket using the square to round technique. The basket has a slightly open bottom for good ventilation and firmly woven sides in a twill design. The result is an ideal gift that lends itself to a wide variety of uses.

No previous experience is necessary and students can expect to complete a basket approximately 8 inches by 12 inches. Please bring a sack lunch, pruning shears, a sharp knife, and a towel to class.

**Instructor:** Robin Taylor Daugherty.

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials).

**Limit:** 10



*Botanical Illustration  
instructor  
Angela Overy  
with Knobby  
Brown.*

**Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206**

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

**Registration Form for Classes and Field Trips**

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

## Winter Songs

Saturdays, February 9 and 16

Section I: For children of age 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.  
(two sessions) Classroom A

Please indicate your section on the registration form.

Tour the Gardens and learn how trees and plants sleep through Old Man Winter's cold. See the dormant buds of trees and discover the small flowers waiting inside bulbs. Listen to the sounds of winter's whisper. Create wind chimes of clay to sing the song of winter in your own garden.

Instructor: Jo Duranceau Cannon studied art at the University of



Late 19th century Tsimshian wolf mask.

Washington and the University of Denver and has extensive teaching experience with children.

Fee: \$13 members/\$14 non-members.

Limit: 12

## Hearts and Flowers

Section I: For children of ages 5-7  
Wednesday, February 13

Section II: For children of ages 8-11  
Thursday, February 14  
(one session)  
Classroom A 3:30 to 5:30 p.m.

Please indicate your section on the registration form.

The pioneers of the Plains made their valentine greetings from flowers, buttons, and lace. Create your own old-fashioned valentine and make a cupid with a moveable bow so his arrow can fly. Design a series of pop-up hearts. Use a quill pen to compose a valentine rhyme and learn the legends of St. Valentine's Day. Tour the Gardens to discover the lore and language of flowers.

Instructor: Jo Duranceau Cannon.

Fee: \$6.50 members/\$7 non-members.

Limit: 12

## Gifts from the Great Mother

Section I: For children of ages 5-7  
Monday through Thursday  
February 4-7

Section II: For children of ages 8-10  
Monday through Thursday  
February 18-21

Section III: For children of ages 11-13  
Monday through Thursday  
February 25-28  
(four sessions)  
Classroom A 3:30 to 5:30 p.m.

Please indicate your section on the registration form.

To the American Indian, the earth was the Great Mother. Learn about a time when men, plants, and animals lived in greater harmony. Discover how the tribes from the mountains to the Great Plains harvested the earth's bounty. Tour the Smithsonian exhibit, "Native Harvests," and see how reeds, grasses, and wood were used to make beautiful and useful objects.

Taste the foods of the Indians' harvest, including acorn bread, and see films of Indian songs and the corn dance. Listen to the shaman's tales of a time when animals shed their fur and birds their feathers and all living spirits conversed. Learn Indian ways and make your own corn husk bag, a sand painting, a pine needle porcupine, and a Great Wolf mask.

Instructor: Jo Duranceau Cannon.

Fee: \$20 members/\$22 non-members.

Limit: 12



A contemporary Hopi Hemis Kachina.



Late 19th century Nez Perce hemp and cornhusk bag.

## Panda's Leaves

Saturdays, January 26 and February 2

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.  
(two sessions) Classroom A

Please indicate your section on the registration form.

Wander in the groves where pandas play and munch on green and delicate bamboo leaves. Discover why the Chinese call bamboo a "winter friend." See how bamboo can be made into parasols, swords, and kites. Observe its hidden inner chamber and learn how its flowers count the passing years. Listen to the music of Pan's pipes and create your own bamboo flute. Make a Wusih figure of a panda and his favorite delicacy.

Instructor: Jo Duranceau Cannon.

Fee: \$13 members/\$14 non-members.

Limit: 12

©1985  
JoDuranceau Cannon

# L I B R A R Y

Helen Fowler Library  
Volume 7, No. 6  
January 1985  
Edited by  
Jean Williams

Librarian:  
Solange Gignac

## New Books in Helen Fowler Library

Bonar, Ann. "How to" Book of Basic Gardening. New York, Sterling, 1982.

"How to" Book of Flower Gardening. New York, Sterling, 1982.

"How to" Book of Vegetable Gardening. New York, Sterling, 1982.

Dowden, Anne Ophelia Todd. From Flower to Fruit. New York, Crowell, 1984.

Eldridge, Judith. Cabbage or Cauliflower?: A Gardener's Guide to the Identification of Seedlings. Boston, D.R. Godine, 1984.

George, Jean Craighead. One Day in the Alpine Tundra. New York, Crowell, 1984.

Jekyll, Gertrude. Gertrude Jekyll on Gardening. Boston, D.R. Godine, 1983.

Newton, James R. Rain Shadow. New York, Crowell, 1983.

Pringle, Laurence P. Being a Plant. New York, Crowell, 1983.

Proudley, Brian. Garden Conifers in Colour. Poole, Blandford Press, 1976.

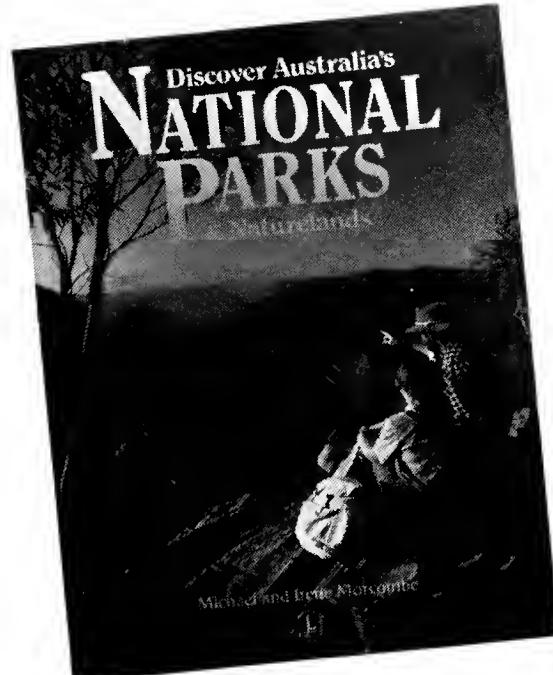
Heathers in Colour. Poole, Blandford Press, 1983.

How to Grow Conifers. Poole, Blandford Press, 1984.

How to Grow Fuchsias. Poole, Blandford Press, 1983.

## Discover Australia's National Parks and Naturelands

By Michael and Irene Morcombe. Lansdowne Press, Sydney, Auckland, London, and New York, 1983. SB 484 A8 M6 1983.



If you are looking out your window at white, wintry Denver, remember that it is surely summer someplace! You could take a warm walk in Wallaroo with authors Michael and Irene Morcombe. *Discover Australia's National Parks and Naturelands*, a worthy two-year effort by the authors, is well-written and beautifully photographed. Their book combines a travelogue with information on plants, animals, and notes on natural history. The excellent photography includes sweeping vistas and close-ups of plant life and native wildlife. The mandatory two pages on Ayers Rock, Mount Olga National Park, are in concert with boobook owls and slipper orchids.

The Morcombes have added to the usual maps and descriptions an interesting collection of local history, explanations of natural phenomena, and sketches of recreational opportunities. A nice time-out is also provided by pages devoted to wildflowers and the many curious creatures that abound in Australia. As a service to the reader who will be traveling in Australia, a 40-page travel guide gives essential information about all the park areas in the country, and a quick reference section provides information on directions, outstanding local features, seasonal data, recreational activities, and accommodations.

While reading you will find the words as fascinating as the photographs. Wallabies and warrumbungles (volcanic cones) enliven the text, and the authors take time for local curiosities which seem endless in Australia.

A warm "thank you" to Michael and Irene Morcombe for a fine tour. Interestingly, a large part of the photography shows Australia's many rivers, lakes, and ponds, giving a fresh image even to the outback. *Discovering Australia's National Parks and Naturelands* is a wonderful close-up of a faraway land.

Brian Dehaven

## THE REVIEWERS

Brian Dehaven

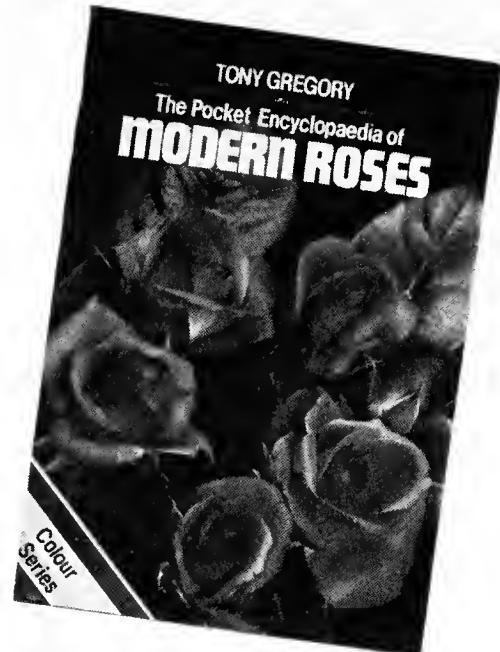
Joann Narverud—Gardener Florist II, Denver Botanic Gardens

Steven Swenson—1984 Summer Intern, Oregon State University

Jean Williams—Volunteer in Helen Fowler Library, Denver Botanic Gardens

## *The Pocket Encyclopaedia of Modern Roses*

By Tony Gregory. Blandford Press, Poole, Dorset, 1984. SB 411 G7 1984.



*The Pocket Encyclopaedia of Modern Roses* is an informative, readable reference for information on modern roses currently grown in England and Europe. Because most of the varieties are not available in the United States, the book is not particularly valuable to rose enthusiasts in the Colorado region. We can only wish a similar text on American rose varieties were available. The author combines beautiful color plates and an interesting introduction to the history of modern roses with an abundance of information on each variety.

Joann Narverud

## *Famous Trees of Texas, Third Edition*

By Texas Forest Service. The Texas A & M University System, 1984. \$17.70. QK 484 T4 F3 1984.

A colorful sense of Texas history pervades this book whose purpose is to memorialize the grand old landmark trees that have witnessed exciting periods and events of Texas frontier history. Although many such trees have been lost, many survive today—some of them are known to have existed when Texas was under Mexican domination.

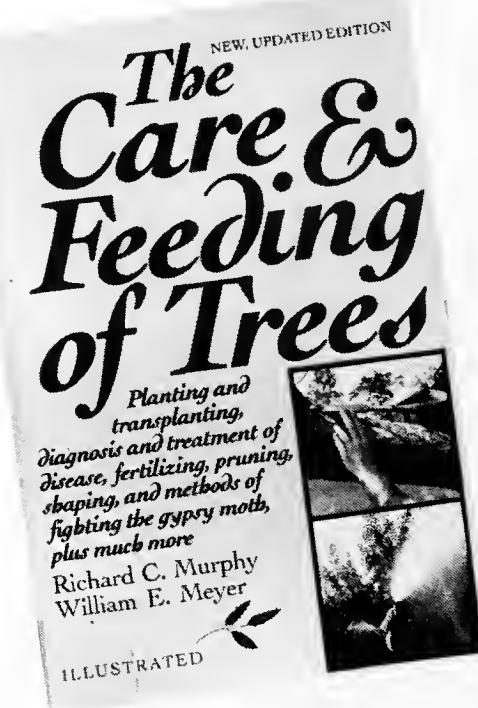
Interesting, even to non-Texans, the book is full of rich evocations of the past. The text is lively and chock-full of quotes from actual diaries and other historical documents. The color photographs are a vivid blend of now and then, creating a nostalgic experience even for those who have never set foot in the Lone Star state.

Tree names and place names are an invocation: Hangman's Oak (every state in the United States must have one of these), the Boat-Landing Cottonwood, the Governor Hogg Pecan, the Champion Yaupon, and, of course, the Whipping Oak. Most of the southern counties in Texas have whipping oak trees which are said to have been used by early courts to punish runaway slaves, thieves, and wife-beaters. Not even the trees' locations escape a drenching sense of place and folk history: the Kissing Oak "at the foot of Colorado Street, in San Marcos, between the Sam Houston Boy Scout Lodge and the American Legion Post 144."

Jean Williams

## *The Care and Feeding of Trees*

By Richard C. Murphy and William E. Meyer. Crown Publishers, Inc., N.Y., 1983. \$5.98. SB 435 M876 1983.



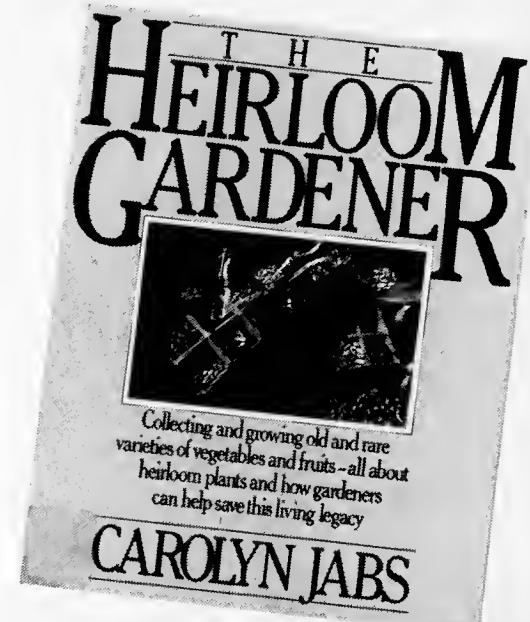
Years of experience in tree culture enabled the authors to produce this simple but comprehensive reference manual for homeowners looking for answers to tree-care questions. In this updated paperback edition, technical information is presented in a concise, easy-to-understand style, and the authors have included many new suggestions for the treatment of tree ailments: injection systems for feeding and controlling diseases and insects, the elimination of painting cuts and wounds, and methods of fighting the gypsy moth. Topics covered include site selection, planting, transplanting, soils, feeding, pruning, watering, and safety tips—not only for trees, but also for the people performing these important tree-care tasks!

Murphy and Meyer provide helpful charts and diagrams to aid early diagnosis and preventive maintenance for disease and insect-related problems. The book ends with a homeowner's guide to popular trees, including useful leaf identification tables and illustrations.

Steven Swenson

## *The Heirloom Gardener*

By Carolyn Jabs. Sierra Club Books, San Francisco, 1984. \$9.95. SB 324.73 J3 1984.



If you are an avid vegetable gardener with traces of a scientist's or collector's soul in your make-up, you will want to steer clear of Carolyn Jabs' new book, *The Heirloom Gardener*—unless you are willing to take on a passionate new avocation!

Like an idea whose time has come, the preservation of old and endangered fruit and vegetable varieties has been quietly catching on over the past few years with gardeners, scientists, conservationists, collectors, seed companies, and historians. If you think you would like to join them, or if you are just curious about all the excitement, this is your sourcebook.

Why collect old seeds? The fruits are often better tasting than the new hybrids and the plants better adapted to specific local growing conditions. They are sometimes hardier, and they offer rich diversity of form, taste, shape, and color. Moreover, conservationists explain, their preservation safeguards an irreplaceable heirloom gene pool. They are a fascinating part of living history at institutions such as Sturbridge Village, Monticello, and Mount Vernon, and they carry unique potential for the creation of wondrous, futuristic new hybrids.

*Heirloom Gardener* provides a rich vein of information for those seriously interested in this topic. An extensive appendix lists and describes seed exchanges, alternative seed companies, living historical farms, federal repositories, and more.

Denver, we are reminded, has Four Mile Historic Park at 715 South Forest Street. The site "recreates life in Colorado in 1867, and the gardens have varieties appropriate to the period." Additionally, National Seed Storage Laboratory, the primary United States seed bank with the responsibility for preserving seed samples of nearly 200,000 plants, is located in Fort Collins, Colorado.

Jean Williams



## Gardening Tips for January

Perhaps the most appropriate way to begin this gardening column for 1985 is to review the outside growing conditions that generally exist in Colorado.

Contrary to popular belief, cold temperatures are not the single most important factor that limits plant growth in Colorado. It may surprise you to know that:

1. Dramatically fluctuating temperatures, drying winds, and low humidity are often as restrictive as low temperatures.
2. Heavy clay soils often exist in the most populated areas. These soils retain water and have poor aeration, challenging the gardener's skills, especially with irrigation.
3. Generally, the soils are high in calcium which restricts the availability of some elements (e.g. iron) required for plant growth.
4. High elevation and intense sunlight, along with a high percentage of sunny days, combine to increase the plant's transpiration (water loss). The average elevation for the state is 6800 feet.
5. Rapid evaporation of water and poor soil drainage make it difficult to amend soils with beneficial substances (e.g. fertilizers). Too much organic matter over a short period of time can result in an accumulation of salts near the root zone.
6. Untimely, heavy wet snows on the eastern slopes of the Rockies occur about every five years catching trees in full leaf (as in October 1984) or at the peak of bloom. These storms are destructive and frustrating to say the least.
7. Temperatures in Colorado can fluctuate 90 degrees within 24 hours. In 1949 temperatures in Fort Collins went from 50 degrees to minus 40 degrees in one day. In 1969, Denver temperatures went

from 85 degrees to minus 3 degrees.

8. Colorado is considered a semi-arid state with the higher populated areas receiving between 10-14 inches of rainfall per year. This moisture often comes either as cloud bursts and is lost through runoff, or as gentle showers and is lost through evaporation.

9. Winters are frequently dry, with little protective snow coverage on the plants. Strong, arid winds cause the exposed plants to dry out during the colder months when we are not inclined to water.

Reviewing these conditions seems inhibiting and depressing, especially if you are an avid gardener.

However, the very conditions that challenge Colorado gardeners also make it possible to grow some of the most brilliant flowers and rich green lawns. By manipulating the environment, taking advantage of microclimates, amending soils, and making proper selections for existing sites, Coloradans have greater opportunities than gardeners in other regions. From the plains to the tundra, from the humid regions to the deserts, we are able to, with care, cultivate their native plants.

There are approximately 30,000 plants in cultivation in North America, each with merit, and many with special requirements. These are likely to vary in any two places, however, these plants may be modified by changes in treatment. What this means is that horticultural practices are unique to all geographic regions.

If you understand the growing conditions, become informed about plant requirements, and use common sense, 1985 should be a very promising year.

Gayle Weinstein  
Botanist Horticulturist at  
Denver Botanic Gardens

## 1984 Annual Report

Copies of the 1984 Annual Report are available by completing and returning the enclosed coupon. This report provides informative highlights of the many events and changes of the past year. You can learn about the role of DBG in the community and what we have to offer you as a member. Ensure your receiving the 1984 Annual Report by mailing the coupon to Denver Botanic Gardens today.

I wish to receive a copy of the 1984 Annual Report of the Denver Botanic Gardens, Inc.

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City & State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone Number \_\_\_\_\_

REQUEST MUST BE RETURNED  
BY MARCH 1, 1985.

Annual Report  
Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

C

A

L

E

N

D

A

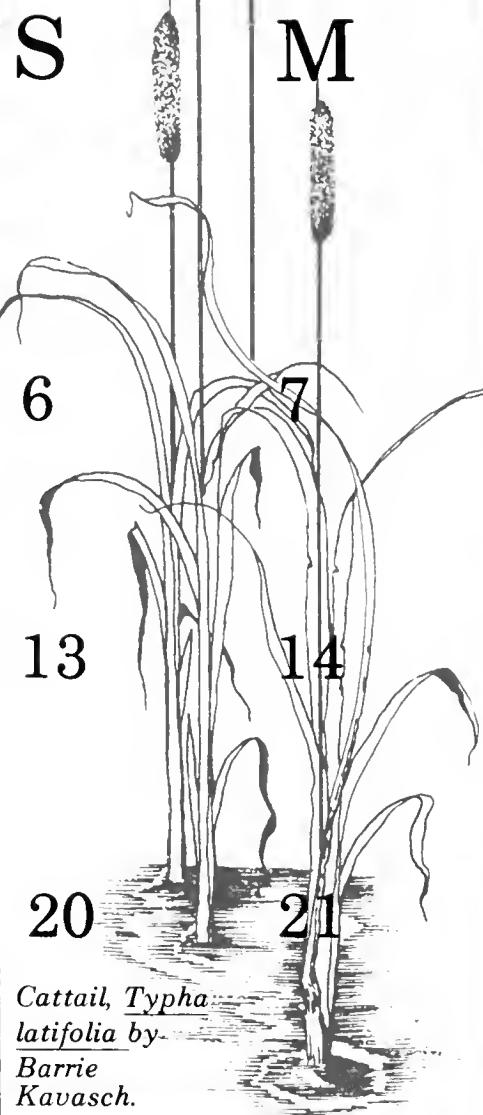
R

# JAN

## Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

**African Violet Society**, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Botany Club**, 3rd Fri.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Dahlia Society**, 2nd Fri.; **Gladiolus Society**, call for info.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Indoor Light Gardening Society**, 3rd Thurs.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Orchid Society**, 1st Tues.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months



Cattail, *Typha latifolia* by Barrie Kavasch.

27

Tree Walk at Fairmount Cemetery

28

February 5  
Woody Plant Identification:  
Evergreen Trees and Shrubs,  
Beginning Botanical Illustration

February 7  
Perennial Pleasures  
February 8  
Basketry Workshop:  
Heart-Shaped Basket

T  
1

New Year's Day  
Gardens closed all day

8

15

Deciduous Flowering Shrub and Ornamental Trees for Colorado

29

February 9  
Tree Walk in Cheesman Park  
February 12  
An Introduction to Amerindian Ethnobotany\*, and American Indian Cookery

W  
2

9

16

30

Watercolor and Mixed Media Painting

February 14  
American Indian Cookery,  
American Indian Traditions in Herbalism\*

T  
3

10

Conservatory Guides Class begins

17

24

31

February 16  
Basketry Workshop  
February 19  
Deciduous Shade and Ornamental Trees for Denver

F  
4

11

18

25

S  
5

12

19

Jan 19- Mar 3  
Native Harvests:  
Plants in American Indian Life

26

Panda's Leaves

## Coming Next Month

February 2  
Botany for Beginners  
Feb 4, 18, or 25  
Gifts from the Great Mother

February 21  
Coniferous Trees for Denver  
February 23  
Basketry Workshop:  
Market Basket

February 4  
Woody Plant Identification:  
Deciduous Trees and Shrubs

\*Lectures will be held at Denver Museum of Natural History

Non Profit Org.  
U.S. Postage PAID  
Permit No. 205  
Denver, CO

Denver Botanic Gardens, Inc.  
909 York Street  
Denver, Colorado 80206  
303-575-3751

January 1985

## TIME VALUE

Address correction requested



# Green

# Thumb

# N

# E

# W

# S

## Distinguished Ethnobotanist Barrie Kavasch is Coming to Lecture and Teach

Distinguished ethnobotanist and lecturer Barrie Kavasch will share her expertise with special lectures and American Indian cooking classes during the week of February 10. Co-sponsored by Denver Botanic Gardens and the Denver Museum of Natural History, her visit is in conjunction with our showing of the Smithsonian exhibit, "Native Harvests: Plants in American Indian Life."

When Europeans first reached North America, they were astonished by the rugged new environment and the abundance of trees and other plant life. American Indians living on this continent for centuries had long been drawing on this wealth of plant resources to meet physical and spiritual needs. Plants provided them with foods, medicines, cosmetics, containers, tools, fuels, apparel, masks, music-makers, and other important items.

Whatever region they inhabited, native Americans had detailed knowledge of the local plants that enriched their world. They knew how to use each part of the plant, from root to leaf tip, in diverse and imaginative ways. Through many centuries, North American Indians have lived in harmony with the plants around them. Their reverence for plants, their growth cycle, and the balance of nature have been central to the Amerindian way of life since the earliest times.

Ms. Kavasch, the curator of the Smithsonian show, is an expert on the uses of plants by the North American Indians. She is the author and illustrator of six books



Barrie Kavasch

including a cookbook of American Indian recipes, *Native Harvests*. Craig Claiborne of the *New York Times* has praised *Native Harvests* as "the most intelligent and brilliantly researched book on the food of the American Indians." She has lectured in ethnobotany at the American Museum of Natural History and the New York Botanical Garden, and also teaches at the New York Restaurant School at the New School for Social Research.

*continued on page 6*

Denver Botanic Gardens

February 1985

Number 85-2



### Inside:

Adult classes pages 7-9

Classes for Kids page 10

Members horticultural event page 2

Smithsonian exhibit film schedule page 6

## DBG Awarded Accreditation by American Association of Museums



Accredited by the American Association of Museums

Complete details can be found on page 3.

## "Special Plants for Special Places"

Members of Denver Botanic Gardens are invited to attend a horticultural workshop on Saturday, March 9, 1985. Titled, "Special Plants for Special Places," the program features four knowledgeable horticulturists who will provide advice on specialty plantings.



"Ornamental Aquatic Plants for Your Garden" will be presented by DBG staff member Joe Tomocik whose responsibilities include the maintenance of our Aquatic Plant Display area. Avid rosarian and DBG Trustee Dr. William Campbell will introduce the increasingly popular old-fashioned or shrub roses.

Former Community Gardens Coordinator John Brett will share the pleasures of container gardening learned from years of hands-on experience and DBG Trustee and ever-loyal volunteer Lainie Jackson will help flower arrangers plan a home cutting garden.

Scheduled for 9 a.m. to 2 p.m. in John C. Mitchell II Hall, "Special Plants for Special Places" is open

only to members of Denver Botanic Gardens. The registration fee is \$10.50 with a box lunch provided or \$5 for those who wish to bring their own lunch. Registrations that include box lunches must be received by March 4. Complete the Education Department form on page 10 to reserve your place.

## Gifts for the Gardens

During the past year several inquiries have been made from members and friends of the Gardens concerning their estate plans. When a donor leaves all or part of his or her estate through a will directing it to an individual or organization it is known as a bequest.

Should you be planning a bequest to the Gardens a will is required and without one it is impossible for the estate to make a gift to an organization. A verbal promise or letter is not sufficient. Remember to consult a qualified attorney; the most modest estate with the simplest wishes must be in the proper legal language by an attorney familiar with state laws. With a drawn will you ensure that your estate will be distributed according to your wishes.

It is suggested that the bequest be flexible. Generally, gifts from a bequest will go into the General Endowment Fund, unless the donor

## Tributes

**In honor of Mrs. R. Anschicks**  
Community Chimes

**In honor of Dr. and Mrs. William C. Jackson**  
Mr. and Mrs. J. B. Chafee

**In honor of Mr. Joe K. Miller**  
Anonymous

**In honor of Mrs. James C. Waring**  
Ruth W. Halpenny

**In memory of Miss Diane Fullerton**  
Mr. and Mrs. Donald C. Campbell

**In memory of C. Lowell Goody**  
Mrs. Margaret Altvater

**In memory of Anne Noyes Johnson**  
Roger and Joan Rhodes

**In memory of Harry J. Kelly, Jr.**  
Mr. and Mrs. Richard Girouard  
Mr. and Mrs. James C. Rheem

**In memory of Graham Morrison**  
Mrs. Margaret Altvater  
Mr. and Mrs. William B. Collister

**Syd Glick**  
Mrs. Ruth M. Tempel

**In memory of Aksel Nielsen**  
Mr. and Mrs. Donald C. Campbell

**In memory of Melvin J. Roberts**  
Mr. and Mrs. James C. Rheem

**In memory of Florence A. Vatter**  
Mrs. Margaret Altvater

Betty Bowman  
William G. Gambill, Jr.

Syd Glick

restricts, in writing, the gift to a specific garden or program. An unrestricted gift is very helpful to further development and the financial future of Denver Botanic Gardens.

You are encouraged to consult an attorney and a financial advisor to determine the best giving plan best suited to your financial situation. If you have drawn a will already, you might consider re-evaluating it with consideration to the many new tax laws.

Bequests to the Gardens are exempt from Federal and State inheritance and estate taxes.

A gift to the Gardens does ensure its future now and for generations to come, while you help a valuable community asset, and yourself, through thoughtful planning.

Gloria Falkenberg  
Director of Development

## Great Getaways

Denver Botanic Gardens has scheduled several exciting trips around the world and the United States. Information on these upcoming excursions can be obtained by calling Andrew Pierce, 575-3751.

Future destinations include:

Grand Tetons	July, 1985
Great Lakes	Late August-early September, 1985

Switzerland, Austria, Italy	July, 1986
--------------------------------	------------

## Green Thumb News Number 85—2 February 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp.

Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than January 18 for March, February 20 for April, and March 20 for May.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.

February 1985

## Dear Members of Denver Botanic Gardens:

I am pleased to inform you that Denver Botanic Gardens has been accredited by the American Association of Museums (A.A.M.). As a member of the Gardens you too can share the great sense of pride our Trustees, staff, and I feel in having attained this goal. There are only nine other botanic gardens/arboreta in the United States that have received accreditation by A.A.M. and only 595 museums out of a total of more than 7000 institutions have achieved this honor.

This distinction puts Denver Botanic Gardens in such company as Fairchild Tropical Garden in Miami; the New York Botanical Garden in Bronx; the Arizona-Sonora Desert Museum in Tucson; the National Gallery of Art in Washington, D.C.; the Metropolitan Museum of Art in New York City; and many of this country's finest cultural institutions.

I would like to share with you some of the comments of the visiting committee, resulting from their on-site evaluation last May:

"The committee was very impressed by the staff members as they were generally well-trained, and fully professional in their attitude, and interested in their work showing their enthusiasm quite openly."

"The public relations effort of the Gardens is quite active and successful, and includes the involvement of several major corporations within the past few years."

"Along with membership, there has evolved a large, active, and effective group of volunteers that appears to be found in every niche of the Gardens. During our visit, we were delightfully surprised to find so many volunteers working in the Gardens and could not really tell the difference between them and the paid staff."

"The Gardens sponsors a great variety of highly successful, educational, and public service programs, including a very successful plant sale, concerts, guided tours for school children and visitors, and a wide variety of horticultural classes for adults... DBG produces an attractive and informative monthly newsletter for the benefit of members, and without a doubt, keeps the members current with the activities and programs of the Gardens."

"The Gift Shop is well known to both (visiting) committee members and is considered one of the premier botanic garden gift shops."

In summarizing their recommendation that Denver Botanic Gardens be accredited, the visiting committee of A.A.M. wrote:

"Denver Botanic Gardens is a well-organized and established botanic garden with a good financial base serving the people of Denver and the surrounding areas in understanding and utilizing the values of plant life. The dedicated and enthusiastic professional staff and

I invite each of you to join me in savoring this very special accomplishment for our Gardens and its accreditation by A.A.M. At the same time, I urge you, as members, to reaffirm your personal commitment to helping us carry forward into the future those same traditions of excellence that have elevated Denver Botanic Gardens to a position of prominence among the major cultural institutions in the United States. This achievement could not have been possible without the dedication, encouragement, and support of each member. I congratulate all of you for being a



Accredited by the  
American Association  
of Museums

volunteers have excellent leadership to guide them wisely. The plant collections are well cared for, and the education programs are diverse, stimulating, and enjoyable. The Director meets regularly with the Board of Trustees of Denver Botanic Gardens, Inc., a private, non-profit support group, and with the manager and executive staff of the Department of Parks (and Recreation) of the City and County of Denver.

"Despite the financial problems these past years, the Gardens has made great strides in bringing to completion 95 percent of their master plan presented in 1970. Long-range planning should be undertaken to determine some very basic matters such as the use of the outlying facilities; the need for an extension to the education building for various functions such as library, herbarium, classroom purposes; and the eventual use of various plant collections."

part of this important milestone in the history of Denver Botanic Gardens.

Sincerely,

Merle M. Moore  
Executive Director

## Tiffany Earthenware Available in Gift Shop

The commemorative earthenware set commissioned by Denver Botanic Gardens and designed and produced by Tiffany & Co. for our 25th Anniversary is now available for sale in our Gift Shop. Pieces include the cup, saucer, dinner and dessert plates, and *pot de gelée*. The Colorado alpine columbine, in delicate shades of lavender and green, graces the off-white earthenware. Although wild columbines are protected by law, picking these rare columbines in the gift shop is perfectly legal.

## Birds in the Gardens

The completion of our Bird Watch Berm in 1983 has inspired members to initiate a bird observation program at the Gardens. Since that time a record of observations has been maintained by botanist horticulturist Beverly Nilsen. Visitors are encouraged to assist in the program by adding birds they sight in particular garden areas to a list maintained in the Helen Fowler Library. Such participation is greatly appreciated, especially during the spring and fall migration (April to May and September to October) when many species appear for a brief time. Many of our feathered visitors prefer specific plants on the grounds, therefore, notes on the plants that appear to be attracting the birds would also be appreciated.

A number of juncos, towhees, warblers, swallows, thrushes, flickers, and woodpeckers have been observed in the Gardens. A great blue heron, showy egret, and black-crowned night heron have been sighted flying overhead. We would enjoy knowing if these and other birds have landed in the various gardens at DBG. You are welcome to assist us with your keen eyes and ears in maintaining a record of occurrence.

## 1985 Garden and Home Show

The exhilaration of observing hundreds of spring flowers during the end of winter is part of the attraction of the Annual Colorado Garden and Home Show. There is no other event in the greater Denver region where one can observe so many flowers or obtain hundreds of landscaping ideas—and all under one roof.

"Pacesetters of the 80's," this year's show, opens its doors at 6 p.m. Friday, February 1 in downtown Denver's Currigan Exhibition Hall. The show will be open from noon to 10 p.m. daily except Sundays when it closes at 6 p.m.

A new attraction this year will be a model train, G-gauge (one-half inch to one foot scale), that will travel throughout Denver Botanic Gardens' display. Downtown chefs will show off their culinary skills and leading landscape architects will display their talents.

Come and see all the delights offered by Denver's premier Garden and Home Show.

## Berry Culture Featured at Denver Men's Garden Club Meeting

"Strawberries, Raspberries, Grapes, Gooseberries, and Currants" will be presented by CSU Professor of Horticulture Harrison Hughes at the February 28 meeting of the Denver Men's Garden Club.

Scheduled for 7:30 p.m. in the DBG House, the program is free and open to the public. For additional information, please contact Ray Fisher at 322-4959.

## Annual Membership Dinner

A change of season is planned for the Annual Membership Dinner. An outdoor dinner will be held on Thursday, August 15, 1985 and complete information can be found in the July issue of the *Green Thumb News*.



## Around the Seasons Special Event

A highly acclaimed film, *The Colonial Naturalist*, depicting the English naturalist, Mark Catesby, and his stay in Williamsburg during 1712-1719, will be shown in the DBG House Thursday, February 28. This showing, sponsored by Around the Seasons, begins at 10:30 a.m. Coffee will be served at 10 a.m. and all DBG members are invited to attend. Donations will be accepted to defray costs.

## 1985 Internship Program Announced

Summer internships at Denver Botanic Gardens provide college students valuable learning opportunities in "applied horticulture." Last year's interns left with a new sense of direction and a feeling that they had just passed a "valuable stepping stone" toward completing their career goals.

This year interns can look forward to obtaining on-the-job experience by working with DBG's professional staff and volunteers. In this 10-week program students will be introduced to the daily operation of a public display garden.

Each intern will be involved in watering, weeding, planting, and pruning; seeding, transplanting, and propagating in the greenhouses; and maintaining the tropical and subtropical plant displays. Besides gaining experience in the plant areas, each student will work in the Helen Fowler Library, the Kathryn Kalmbach Herbarium, the Pauline A. and George R. Morrison Horticultural Demonstration Center, and the Education Department. Classes, field trips, lectures, and demonstrations will be provided throughout the summer to complete the learning experience.

A \$2000 taxable stipend will be paid each intern. All applicants must have completed their sophomore year in college with a G.P.A. of 2.5 or higher on a 4.0 scale. Completion of at least introductory botanical or horticultural coursework is necessary in order to be considered.

Application forms can be obtained by calling the Education Department, 575-3751, or by writing:

Education Director  
Denver Botanic Gardens  
909 York Street  
Denver, CO 80206.



1984 summer interns Steve Swenson (left) and Neil Snow

### Coming Events

On Sunday, March 10, knowledgeable rosarians will gather in John C. Mitchell II Hall for a Rose Symposium to share important pointers on techniques for growing roses.

Denver Botanic Gardens' Lobby Court and John C. Mitchell II Hall will overflow with tulips, lilies, daffodils, and other signs of spring on Saturday and Sunday, March 16 and 17. The Dutch Floral Design Show, a popular show featuring flowers imported from Holland, will offer design demonstrations.

Cacti for novice and serious collectors will be available to DBG visitors in John C. Mitchell II Hall Saturday, March 23 and Sunday, March 24 during the Colorado Cactus and Succulent Society Show and Sale. Educational features, mini-programs, T-shirts, potting mixtures, and reference materials complete this two-day show and sale.

The 23rd Annual Rocky Mountain Council's African Violet Show and Sale on Saturday and Sunday, March 30 and 31 is sure to please violet lovers. In addition to a judged show, a sale of violets will take place and questions on violet and other gesneriad care can be answered by Council members.

Watch your March *Green Thumb News* for additional details on show times and programs for these coming events.

### Attention Bookworms and Philatelists

The Annual Plant and Used Book Sale will soon be upon us. In fact, the days of the sale, Friday, May 10 and Saturday, May 11 are less than four months away. Librarian Solange Gignac reminds everyone that book and stamp donations are gratefully accepted at the Helen Fowler Library between now and then.

## 1984 Annual Report

Copies of the 1984 Annual Report are available by completing and returning the enclosed coupon. This report provides informative highlights of the many events and changes of the past year. You can learn about the role of DBG in the community and what we have to offer you as a member. Ensure your receiving the 1984 Annual Report by mailing the coupon to Denver Botanic Gardens today.

I wish to receive a copy of the 1984 Annual Report of the Denver Botanic Gardens, Inc.

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City & State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone Number \_\_\_\_\_

REQUEST MUST BE RETURNED  
BY MARCH 1, 1985.

Annual Report  
Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

## Lectures

On Tuesday, February 12, from 7 to 9 p.m., Ms. Kavasch will present "An Introduction to Amerindian Ethnobotany" in West Auditorium of the Denver Museum of Natural History. In this illustrated lecture, plant knowledge and conservation practices of the various Indian cultures will be discussed along with the many ways that the earliest Americans used plants for art and technology and as sources of wild foods, beverages, medicines, smoking mixtures, and chewing gums.

"American Indian Traditions in Herbalism" is the topic of her West Auditorium program on Thursday, February 14 from 7 to 9 p.m.

## Cooking Classes

In addition, Ms. Kavasch will teach a two-session course in "American Indian Cookery: the Original Cuisine" on Tuesday and Wednesday, February 12 and 13 from 9 a.m. to noon at Denver Botanic Gardens. Limited to 15 students, the class will be repeated on the mornings of February 14 and 15.

America's food heritage evolved directly from the unique foods native to this country as well as the creative resourcefulness of Amerindian cooks in using wild fruits and vegetables, game, grains, herbs, and fresh fish.



*Contemporary Navajo silver and turquoise Squash Blossom necklace.*

Groundwork for much of our modern medicine was begun on this continent hundreds of years ago and Ms. Kavasch will explore how rich Amerindian pharmacopoeia provided our earliest anesthetics, anti-tumor treatments, and birth control drugs as well as a wide variety of holistic health applications. Members of Amerindian healing societies were the first parapsychologists practicing in North America and their successes still intrigue modern medicine. Learn about the roots of Amerindian herbalism in this illustrated lecture.

The fee for each lecture is \$5 for members of either DBG or the Denver Museum of Natural History. Non-members will be charged \$6.50 per lecture. Use the Education Department registration form on page 10 to register.

Indian cuisines of the Northwest coast, the pueblo Southwest, and the tribal Northeast will be presented as a variety of traditional cooking techniques are recreated and adapted to modern facilities.

Prepare regional delicacies such as Iroquois wild mushroom soup with corn dumplings, Kwakiutl salmon cakes, Navajo fry bread, Yakima spiced sunchoke, and Muckleshoot wild raspberry pudding. A complete meal, accompanied by wild fruit teas and beverages, will be served at each session of the class.

The fee for each two-session course is \$42 for members of Denver Botanic Gardens or the Denver Museum of Natural History, and non-members of either group will be charged \$46. Please register using the Education Department form on page 10.

## American Indian Films Accompany Smithsonian Exhibit

Accompanying the Smithsonian Institution's traveling exhibit are four color films chosen to highlight the ingenious plant-related technical skills of the American Indians.

Each film will be shown once a day on Saturday and Sunday afternoons in Classroom C from Saturday, January 19 through Sunday, March 3. There is no additional charge for the movies beyond the normal non-member gate admission fee.

## Film Schedule:

1:30 p.m. *Mohawk Basketmaking: A Cultural Profile*  
28 minutes

This beautifully photographed film presents the black ash splint basketry tradition of the Mohawk tribe on the St. Regis reservation. Harvesting, refining, and working the splints into diverse baskets are covered.

2:00 p.m. *Beautiful Tree—Chiskale*  
20 minutes

The Southwestern Pomo of California call the tan oak "Chiskale," meaning "Beautiful Tree," as the acorns were essential to the food economy. From oral traditions and memories of present-day Indians, this film reconstructs and demonstrates the making of acorn bread.

2:30 p.m. *Wigaasjimaan: Ojibwa Birch Bark Canoe-Making*  
36 minutes

Made by the Saginaw band of the Chippewa Indians, this film shows the process of making a birch bark canoe, from stripping the bark to floating away on the finished canoe. It is narrated in Ojibwa with English subtitles.

3:15 p.m. *Hopi: Songs of the Fourth World*  
60 minutes

This spectacular film highlights the breadth and spirituality of the Hopi world, interviewing numerous Hopi peoples about their lives. The film demonstrates the continuing importance of corn in the Hopi culture.

# Education Department

## An Introduction to Amerindian Ethnobotany

Tuesday, February 12 7 to 9 p.m.  
West Auditorium at Denver Museum of Natural History

In this illustrated lecture, plant knowledge and conservation practices of various Indian cultures will be discussed along with the many ways that the earliest Americans used plants for art and technology and as sources of wild foods, beverages, medicines, smoking mixtures, and chewing gum.

**Instructor:** E. Barrie Kavasch is an ethnobotanist and author of six books. She has lectured at the American Museum of Natural History, the New York Botanical Garden and teaches at the New York Restaurant School of the New School for Social Research.

**Fee:** \$5 members/\$6.50 non-members

## American Indian Traditions in Herbalism

Thursday, February 14 7 to 9 p.m.  
West Auditorium at Denver Museum of Natural History

Groundwork for much of our modern medicine was begun on this continent hundreds of years ago. Ms. Kavasch will explore how the rich Amerindian pharmacopoeia provided our earliest anesthetics, anti-tumor treatments, and birth control drugs as well as a wide array of holistic applications. Amerindian healing societies were the first parapsychologists practicing in North America, and their successes still intrigue modern medicine. Learn about the roots of herbalism in this country in this illustrated lecture.

**Instructor:** E. Barrie Kavasch

**Fee:** \$5 members/\$6.50 non-members

## American Indian Cookery: the Original American Cuisine

**Section I:** Tuesday and Wednesday, February 12 and 13

**Section II:** Thursday and Friday, February 14 and 15  
(two sessions)  
9 a.m. to noon DBG

Please indicate your section on the registration form.

America's food heritage evolved directly from the unique foods native to this continent as well as the creative resourcefulness of Amerindian cooks in using wild fruits and vegetables, game, grains, herbs, and fresh fish.

Indian cuisines of the Northwest coast, the pueblo Southwest, and the tribal Northeast will be represented as a variety of traditional cooking techniques are recreated and adapted to modern facilities. Prepare regional delicacies such as Iroquois wild mushroom soup with corn dumplings, Kwakiutl salmon cakes, Navajo fry bread, Yakima spiced sunchoke, and Muckleshoot wild raspberry pudding.

A complete meal, accompanied by appropriate wild teas and wild fruit beverages, will be served at each session of the class.

**Instructor:** E. Barrie Kavasch

**Fee:** \$42 members/\$46 non-members (includes \$18 for materials).

**Limit:** 15

## Unusual and Exotic Houseplants

Mondays, February 18, 25  
from 7 to 9 p.m. and  
Saturday, March 2 from 9 to  
10:30 a.m.  
(three sessions) Classroom C

This class is for the gardener who wants to grow more exciting and unusual plants for the home, office, or greenhouse than are generally grown. Uncommon aroids, bromeliads, unusual cacti and other succulents as well as orchids suitable for windowsill culture, will be included. Learn what light, soil, temperature, and humidity requirements are needed to grow these plants well.

The course will conclude with a behind-the-scenes tour of the DBG greenhouses to observe some of our outstanding collections.

**Instructor:** Gary Davis is a gardener florist II at DBG whose responsibilities include the aroid and bromeliad collections. He has been an avid collector of bromeliads for 10 years.

**Fee:** \$20 members/\$22 non-members.

## Perennial Pleasures

Thursdays, February 7, 14, 21, 28  
March 7  
(five sessions)  
Classroom C 7 to 9 p.m.

With proper planning and planting, perennials can enhance any garden with long-term beauty and reduced maintenance. Discover the pleasures of perennial gardening in this five-week course that covers garden design, soil preparation, and cultivation as well as a multitude of suggested plants.

Perennials for specialized situations, such as shady areas, will also be discussed. There will be ample opportunity for questions.

**Instructor:** Andrew Pierce is a horticulturist and is assistant director of DBG. He is an avid grower of perennials and alpine plants.

**Fee:** \$40 members/\$44 non-members.

**Limit:** 18

## Advanced Wheat Weaving

Mondays, March 11, 18 (skip March 25), April 1, 8  
(four sessions)

Classroom B 7 to 9 p.m.

This series of workshops is a continuation of the wheat weaving course held last fall. Advanced techniques for larger, more complicated projects such as house



*Wheat weaving instructor  
Maureen McGowan*

blessings, brides-of-corn, and harvest dolls will be taught. Experience with different grains such as Italian and brown bearded wheat, oats, and barley will be provided.

Either the instructor's consent or previous enrollment in a wheat weaving course is necessary. Please bring scissors and a ruler to class.

**Instructor:** Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

**Fee:** \$46 members/\$51 non-members (includes a \$14 materials fee).

**Limit:** 12

**CLASSSES**  
**Winter**  
**1985**  
**Denver Botanic Gardens**



## Deciduous Shade and Ornamental Trees for Denver

Tuesdays, February 19, 26, March 5, 12, 19  
**Classroom C** 7:15 and 9:15 p.m.  
 and  
**Field Trip on Saturday, March 23 from 9 a.m. to noon (six sessions) DBG House**

Due to this unique climate, very few trees are actually indigenous to the Denver area. It is not so much cold hardiness, but soil, moisture, humidity, and extreme fluctuations in temperatures that make it so difficult for trees to survive.

This class will acquaint students with a variety of plant material and will establish an understanding of their characteristics, natural history, culture, problems, and landscape value as an ornamental or shade tree.



Photos by  
instructor  
Jeffrey Frank.

Through the use of slides, students will observe each of approximately 100 species in all seasons, with an emphasis on winter characteristics. A field trip is included for a first-hand look at some of the species discussed in class.

**Instructor:** An experienced teacher, Jeffrey Frank studied horticulture at Pennsylvania State University and earned a master's degree in landscape architecture from the University of Virginia. He is presently in private practice in Denver.

**Fee:** \$45 members/\$49.50 non-members.

## Coniferous Trees for Denver

**Thursday, February 21 from 7:15 to 9:15 p.m.**

**and**  
**Field Trip on Saturday, February 23 from 9 a.m. to noon (two sessions) DBG House**

This class will acquaint students with coniferous trees (both deciduous and evergreen) that are hardy to the Denver area. The majority of these trees are indigenous to the Colorado Rockies, while others are from the Eastern United States and Western Europe.

Through the use of slides, students will observe approximately 20 species to establish an understanding of their distinguishing characteristics, natural history, culture, and landscape value.

**Instructor:** Jeffrey Frank.

**Fee:** \$13 members/\$14 non-members.

## Botany for Beginners

**Saturdays, February 2, 9, 16, 23 (four sessions)**  
**Classroom B 9:30 to 11:30 a.m.**

This is a course for those who have no background in botany but wish to know more about plant parts and what they do. This is fundamental if you wish to learn how to identify plants. It will also help you to appreciate what plants require.

Some microscope work as well as greenhouse tours are included.

**Instructor:** Moras L. Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience.

**Fee:** \$32 members/\$40 non-members.

## All About Annuals

**Wednesdays, March 6, 13, 20, 27 (four sessions)**

**Classroom A 7 to 9 p.m.**

Annuals are extremely versatile garden plants with hundreds of available selections. They provide cut flowers and color and offer the opportunity to re-design a different garden each year. This class will include detailed information on species, hybrids, and cultivars along with design and culture considerations.

**Instructor:** Gayle Weinstein

**Fee:** \$32 members/\$35 non-members

## Woody Plant Identification

**Section I: Deciduous Trees and Shrubs**

**Mondays, February 4, 11, 18, 25, March 4: 7 to 9 p.m. and Field Trip on Sat., March 9 from 9 a.m. to noon or**

**Section II: Evergreen Trees and Shrubs**

**Tuesdays, February 5, 12, 19, 26, March 5: 7 to 9 p.m. and Field Trip on Sat., March 9 from 1 to 4 p.m.**

**(six sessions) Classroom B**  
 Please indicate your section(s) on the registration form.

Learn to identify the many beautiful trees and shrubs that are grown in our region. In this introductory course in plant recognition, the serious student will learn to identify at least 100-150 species of deciduous trees and shrubs or evergreens.

Each class meeting consists of a lecture and a lab period to provide ample hands-on experience with the plant materials. The course will conclude with a field trip. Register for either section or both.

**Instructor:** Gayle Weinstein is a botanist horticulturist at DBG and oversees all aspects of the outdoor plant collections. She has taught horticultural subjects at Ohio State University and the Aurora Public Schools Technical Center.

**Fee:** \$45 members/\$49.50 non-members.

**Limit:** 18

## Basketry Techniques

**Thursdays, March 14, 21, (skip March 28), April 4, 11, 18**  
**Section I: 12:30 to 4 p.m. except March 14 when the class meets until 4:30 p.m.**  
**Section II: 6:30 to 10 p.m. except March 14 when the class will begin at 6 p.m.**  
**(five sessions) Classroom B**

Please indicate your section on the registration form.

Learn the traditional Appalachian hen basket and some of its variations. These gracefully-shaped baskets originated in Scotland and came to America with the Highland settlers. Students will learn this rib and split technique in a variety of shapes and can expect to complete one basket each session.

No previous experience is necessary. Please bring a sack lunch, pruning shears, sharp knife, and towel to class.

**Instructor:** Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

**Fee:** \$95 members/\$105 non-members (includes a \$35 materials fee for the construction of five baskets).

**Limit:** 10

## Basketry Workshop: Spoke and Split Basket

**Saturday, February 16  
 (one session)**  
**Classroom B 9 a.m. to 4 p.m.**

Learn how to make a traditional Appalachian spoke and split basket in this one-day workshop. In it, a series of flat splits radiate outward from the center of the basket's bottom. As it is worked upward, it can take a variety of shapes, all of them round. No previous experience is necessary and students can expect to complete a basket 11 inches across and 12 inches tall (includes handle). Please bring a sack lunch, pruning shears, a sharp knife, and a towel to class.

**Instructor:** Robin Taylor Daugherty  
**Fee:** \$28 members/\$31 non-members (includes \$8 for materials).

**Limit:** 10

## Make Your Own Easter Basket

**Section I: Saturday, March 9**  
**Section II: Friday, March 15 (one session)**  
**9 a.m. to 4 p.m. Classroom B**

Please indicate your section on the registration form.

Start a family tradition by creating your own handmade Easter basket from natural reed. Wrap its handle and decorate it appropriately. Students will complete one basket in this all-day class.

No previous experience is necessary and participants should bring a sack lunch and pruning shears, sharp knife and towel to class.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials).

**Limit:** 10

## Vegetable Gardening Basics

**Section I: Saturdays, February 2, 9, 16, 23**  
**9:30 to 11:30 a.m. or**

**Section II: Wednesdays, February 6, 13, 20, 27**  
**7 to 9 p.m.**

**DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue.**

Please indicate your section on the registration form.

Do you long for the taste of a fresh tomato or an ear of sweet corn eaten within minutes of picking? Learn how to grow your own fresh vegetables in time for planting this spring. This course will explain garden design, soil preparation, variety selection, maintenance, specific culture of common vegetables, and potential problems with pests and diseases to the novice gardener. Emphasis will be on intensive methods of cultivation for maximum production in small spaces.

**Instructor:** Lynn Thompson is a horticulturist who coordinates DBG's Community Vegetable Gardening Program. She has taught many classes on topics pertaining to home vegetable gardening in Colorado.

**Fee:** \$32 members/\$35 non-members.

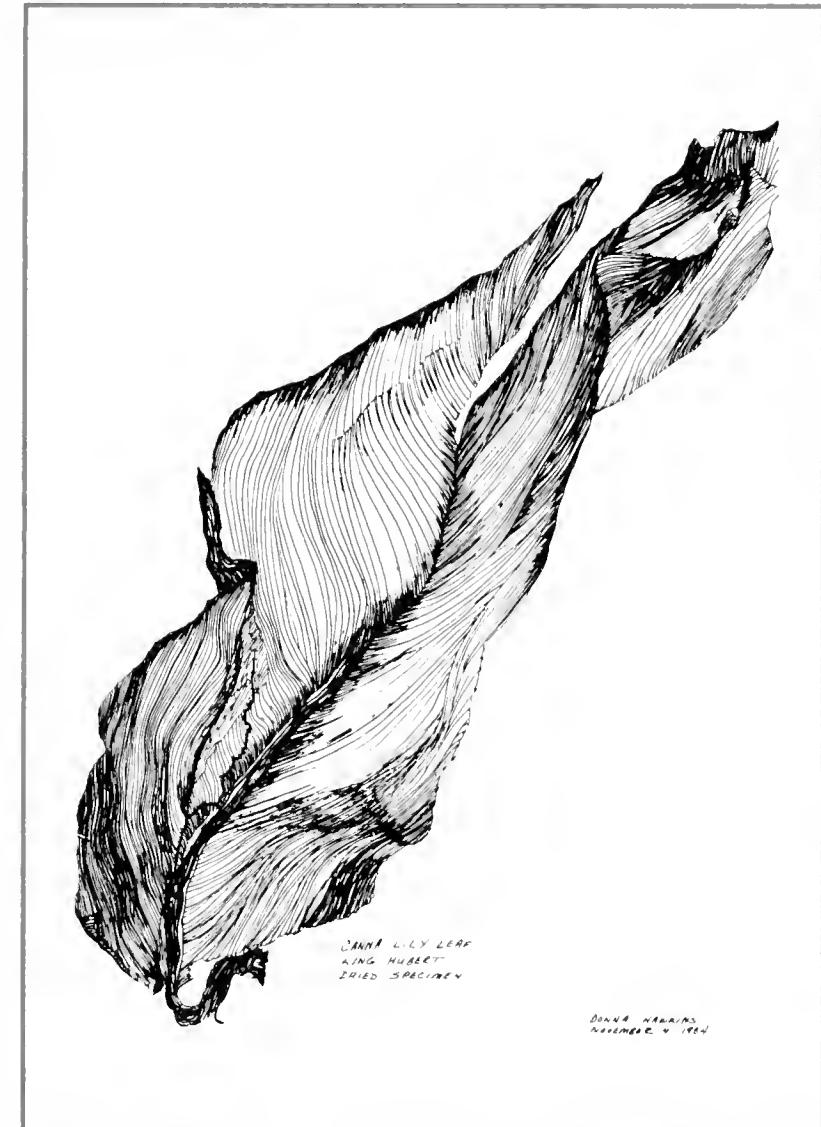
## Beginning Botanical Illustration

**Tuesdays, February 5, 12, 19, 26**  
**March 5, 12**  
**(six sessions)**  
**Classroom B 9:30 to 11:30 a.m.**

Cold winter mornings are an ideal time to get acquainted with some of the many exotic tropical plants in our collections.

This introductory course will stress accurate drawing of flowers, roots, stems, and leaves. Fresh plant material will be used for each class and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first meeting.

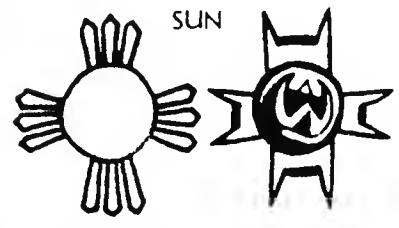
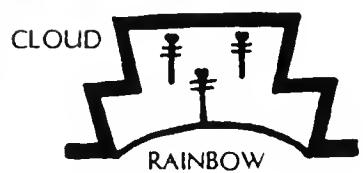
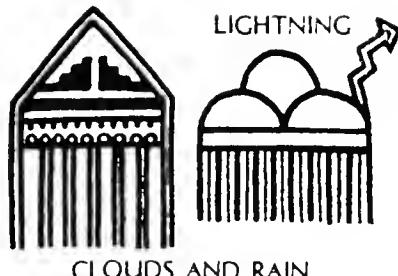


**Instructor:** Angela Overy received her National Diploma of Design from London University, England and designed in London, New York, and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

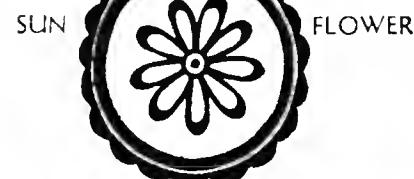
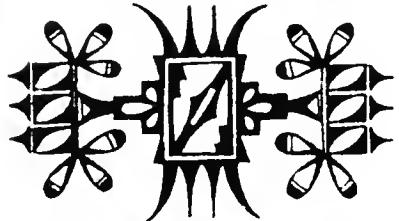
**Fee:** \$48 members/\$53 non-members.

**Limit:** 20

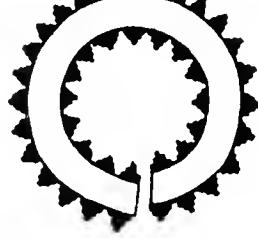
*"Canna Leaf"*  
 by Donna Hawkins in  
 Angela Overy's  
 Beginning  
 Botanical  
 Illustration  
 class.



ALTAR WITH FEATHERS



EXIT TRAIL OF LIFE



### Denver Botanic Gardens 909 York Street Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

### Gifts from the Great Mother

- Section I:** For children of ages 5-7  
Monday through Thursday  
February 4-7
- Section II:** For children of ages 8-10  
Monday through Thursday  
February 18-21
- Section III:** For children of ages 11-13  
Monday through Thursday  
February 25-28  
(four sessions)

Classroom A 3:30 to 5:30 p.m.

Please indicate your section on the registration form.

To the American Indian, the earth was the Great Mother. Learn about a time when men, plants, and animals lived in greater harmony. Discover how the tribes from the mountains to the Great Plains harvested the earth's bounty. Tour the Smithsonian exhibit, "Native Harvests," and see how reeds, grasses, and wood were used to make beautiful and useful objects.

Taste the foods of the Indians' harvest, including acorn bread, and see films of Indian songs and the corn dance. Listen to the shaman's tales of a time when animals shed their fur and birds their feathers and all living spirits conversed. Learn Indian ways and make your own corn husk bag, a sand painting, a pine needle porcupine, and a Great Wolf mask.

**Instructor:** Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

Fee: \$20 members/\$22 non-members.

Limit: 12

### Winter Songs

Saturdays, February 9 and 16

**Section I:** For children of age 5-7  
10 a.m. to noon

**Section II:** For children of ages 8-11  
1 to 3 p.m.  
(two sessions) Classroom A

Please indicate your section on the registration form.

Tour the Gardens and learn how trees and plants sleep through Old Man Winter's cold. See the dormant buds of trees and discover the small flowers waiting inside bulbs. Listen to the sounds of winter's whisper. Create wind chimes of clay to sing the song of winter in your own garden.

**Instructor:** Jo Duranceau Cannon.

Fee: \$13 members/\$14 non-members.

Limit: 12

### Hearts and Flowers

**Section I:** For children of ages 5-7  
Wednesday, February 13

**Section II:** For children of ages 8-11  
Thursday, February 14  
(one session)

Classroom A 3:30 to 5:30 p.m.

Please indicate your section on the registration form.

The pioneers of the Plains made their valentine greetings from flowers, buttons, and lace. Create your own old-fashioned valentine and make a cupid with a moveable bow so his arrow can fly. Design a series of pop-up hearts. Use a quill pen to compose a valentine rhyme and learn the legends of St. Valentine's Day. Tour the Gardens to discover the lore and language of flowers.

**Instructor:** Jo Duranceau Cannon.

Fee: \$6.50 members/\$7 non-members.

Limit: 12

©1985  
JoDuranceau Cannon

### Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

## Gardening Tips for February

Trees are one of our most important natural resources. We take them from the wild, grow them protectively in nurseries, invest large amounts of money in them, and then plant and expose them to the wonders of urban living complete with pollution, compaction, construction, road salts, agricultural chemicals, lawn mowers, snow plows, weed whips, pets, and people. And what is more amazing—we expect them to survive!

Who takes the responsibility of caring for these trees? Tree care programs are riddled with myths, misunderstandings, and outdated information. Improved methods have been available for the last 10 years, yet outdated procedures and misguided good intentions continue. Controversy results when adjustments to old treatments are recommended. Pruning and wound dressing are two examples where procedures have changed.

If we understand some basic concepts of trees and how they respond to the environment, then we can play an important role in maintaining our trees and reducing some of their environmental stress.

Wounds are the major problems and sources of injury and disease to trees. They initiate a process that may lead to loss of landscape value, decay, and weakness. All parts of the plant can be wounded including the roots, trunks, and branches. These wounds may be inflicted by animals, insects, or man. They can occur during construction of buildings, widening of roads, snow removal, mowing, pruning, and staking. Diagnosis is difficult because symptoms of injury may not show up for 5 to 12 years after the damage occurred.

The trees along South University Street below Kentucky Avenue are a case in point. Severe root damage probably occurred this past summer when the road was widened and storm sewers were repaired. How long will it take for these trees to decline without special care beginning now? In five years who will remember this year's construction work? Most people will forget.

What defines a wound? A wound is a break in the bark of a tree that exposes the wood, providing an entry point to invading microorganisms. Once the wood is injured it does not heal. Unlike human beings, trees do not replace, repair, or restore tissue to its original state.

After a wound occurs, chemical changes take place providing barriers against invading microorganisms. The tree responds to these attacks by enclosing or compartmentalizing the endangered area.

In the natural process of a tree's life, when a branch dies, the tree chemically forms a protective zone at the base of the branch. Branches have internal tissues that separate them from the trunk. As the branch dies these tissues form, the bark is forced upward, and a ridge or collar develops. This ridge is the area that defines the separation between branch and trunk. A dying branch is walled off at this point and it usually breaks off, or self-prunes, within this collar.

This separation has a definite impact on tree-care procedures such

compartmentalization, the tree's defense against invaders, and allows for further invasion. Close cuts to the inside of a collar result in trunk wounds. Rapid-forming callus tissue could not be fast enough to prevent entry by microorganisms.

Another incorrect practice is the painting of wounds. Research has shown that this procedure is cosmetic and provides no healing. In fact, it may be more harmful than beneficial as it provides a favorable warm, moist environment in which pathogenic microorganisms can reproduce. Watering and fertilizing are examples of more valuable actions that can be taken to increase the chances of maintaining a healthy, disease-resistant tree.

Compartmentalization of decay in trees has been researched for the past 20 years. The results have had



as pruning. If we were to continue pruning practices as taught in the past, we would make a flush cut as close to the trunk as possible, removing the dead branch and collar. This practice destroys the

a great impact on how we maintain and care for our trees. For more detailed information, please write Dr. Alex L. Shigo, Northeastern Forest Experiment Station, P.O. Box 640, Durham, NH 03824.

*Photo by  
instructor Jeff  
Frank*

Gayle Weinstein  
Botanist Horticulturist at  
Denver Botanic Gardens

C

A

L

E

N

D

A

R

S

M

T

W

T

F

S



**Regular Meetings  
of Plant Societies**

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues.; Botany Club, 3rd Fri.; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

3

4

Woody Plant Identification  
February 4-7  
Gifts from the Great Mother

10

11

An Introduction to Amerindian Ethnobotany\*, American Indian Cookery

17

18

February 18-21  
Gifts from the Great Mother  
Unusual and Exotic House-

24

25

February 25-28  
Gifts from the Great Mother

5

Woody Plant Identification, Beginning Botanical Illustration

12

Hearts and Flowers

19

Deciduous Shade and Ornamental Trees for Denver

26

March 10  
Rose Symposium  
March 14  
Basketry Techniques

6

Vegetable Gardening Basics

13

American Indian Cookery, American Indian Traditions in Herbalism\*

20

Coniferous Trees for Denver

27

March 15  
Make Your Own Easter Basket

28

March 16 and 17  
Dutch Floral Design Show

7

Perennial Pleasures

14

March 23 and 24  
Cactus and Succulent Show and Sale

21

March 23 and 31  
African Violet Show and Sale

1

February 1 to March 3  
Native Harvests: Plants in American Indian Life

8

Basketry Workshop: Heart-Shaped Basket

15

Basketry Workshop: Spoke and Split Basket

9

Tree Walk in Cheesman Park

16

Basketry Workshop: Market Basket

23

\*Lectures will be held at Denver Museum of Natural History

### Coming Next Month

March 6  
All About Annuals

March 9  
Make Your Own Easter Basket  
Special Plants for Special Places

March 10  
Rose Symposium  
March 14  
Basketry Techniques

March 15  
Make Your Own Easter Basket

March 16 and 17  
Dutch Floral Design Show

March 23 and 31  
African Violet Show and Sale

March 30 and 31  
African Violet Show and Sale

Denver Botanic Gardens, Inc.  
909 York Street  
Denver, Colorado 80206  
303-575-3751

Non Profit Org.  
U.S. Postage PAID  
Permit No. 205  
Denver, CO

**February 1985**

**TIME VALUE**

Address correction requested



# Green

# Thumb

# N E

Denver Botanic Gardens

March 1985

Number 85-3



# W

# S

## Dutch Floral Design Show March 16-17



Brinkmann Wholesale Florists in cooperation with United Floral Industry of Colorado and Denver Botanic Gardens will present the fourth annual Dutch Floral Design Show on Saturday and Sunday, March 16-17. Dutch growers have pioneered thousands of new growing methods and techniques for the production of some of the finest flowers in the world. Flowers are either field-grown or greenhouse-produced and their incredible variety and excellent keeping quality is legendary. Lilacs, freesias, lilies, tulips, daffodils, and roses are just a few of the many kinds of flowers that will be imported specifically for this show.

The program includes two floral design demonstrations by noted Colorado designers E. Frank Dowling III, Carolyn McGrath, and David Squires, which will highlight arranging techniques and the proper care of cut flowers. The two-hour demonstrations are scheduled for 1 p.m. on Saturday and Sunday afternoons. Although there is no charge for the design demonstrations, the regular non-member gate fee will be in effect. Don't miss this outstanding opportunity to see experts arrange a fantastic assortment of Dutch spring flowers.

## Members Invited to Specialty Plants Program

Members of Denver Botanic Gardens are encouraged to attend a horticultural workshop on Saturday, March 9, 1985. Titled, "Special Plants for Special Places," the program features four knowledgeable horticulturists who will provide advice on specialty plantings.

### Inside:

*Native Harvests: Plants in American Indian Life*  
page 3

*Adult classes,*  
page 6

*Classes for Kids* page 8

1984 Dutch  
Floral Design  
Show arranger  
Albert Feeger

## Watch For Our New Vehicles

"H.P." of H.P. Art in Evergreen applied Denver Botanic Gardens' logo to our two new vehicles. The passenger van, purchased with funds contributed by the Pauline A. and George R. Morrison Charitable Trust, has been modified for use in providing on-site horticultural therapy training to service agencies throughout the area. The cube-van was purchased with funds from our city budget, the vehicle replacement fund, and is used for transporting plants and making weekly purchases of parts and supplies. The Associates of Denver Botanic Gardens contributed the cost of having the painting done through a donation to the Director's Discretionary Fund.



## Tributes

**In memory of Mrs. J. L. (Virginia) Adams**  
Mildred Cook  
**In memory of the son of Dr. and Mrs. Brian Bird**  
Julie Smith  
**In memory of Gary Briber**  
Morning Belles Garden Club  
**In memory of Frederick Edward Brooks**  
Irene Louise Hubert  
**In memory of Della J. Dunbar**  
Mrs. Carol S. Gibson  
**In memory of Helen Fukui**  
Mr. and Mrs. James C. Rheem  
**In memory of Donna Hamilton**  
Mr. and Mrs. John C. Mitchell  
**In memory of Samuel Heacock**  
Solange G. Gignac  
**In memory of Anne Johnson**  
Pandora L. Wilson  
**In memory of Charles J. Kelley**  
Mr. and Mrs. John C. Mitchell

## Specialty Plants (cont.)

Cultural pointers for ornamental aquatic plants as well as old-fashioned or shrub roses will be featured. Flower arrangers will learn how to plan a home cutting garden and city dwellers will delight in learning the many pleasures of container gardening.

Scheduled for 9 a.m. to 2 p.m. in John C. Mitchell II Hall, this program is open only to members of Denver Botanic Gardens. The registration fee is \$10.50 with a box lunch provided or \$5 for those who wish to bring their own. Registrations that include box lunches must be received by March 4. Complete the Education Department form on page 8 to reserve your place.

## Rocky Mountain African Violet Council Show and Sale

A spectacular array of African violets and other gesneriads can be found in the 23rd Annual African Violet Show and Sale, "Violets, Myths, and Magic."

Beginning at 1 p.m. on Saturday, March 30, the Rocky Mountain African Violet Council will welcome visitors to Denver Botanic Gardens' John C. Mitchell II Hall for a judged show. During the show a sale will take place in the classrooms downstairs.

Old and new varieties of standard-sized plants, miniature and semi-miniature plants, trailers, and other gesneriads will all be exhibited. A special section with artistic plantings and arrangements using African violet plants or blossoms will be included as part of the show. All judging will be done by certified African Violet Society Judges.

The public is cordially invited to attend this show and sale. Photographers are welcome to take pictures from 9 to 10 a.m., Sunday, March 31, as well as any time during the hours the show is open. Show hours are 1 to 4:30 p.m. on Saturday and 10 a.m. to 4:30 p.m. Sunday, March 31.

A \$3 non-member gate admission fee is the only charge for this show. Council members will be on hand at all times to answer questions on care and educational demonstrations will be presented to erase some of the myths and encourage some of the magic of African violets.

### Green Thumb News Number 85—3 March 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than February 20 for April, March 20 for May, and April 19 for June.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the  
American Association  
of Museums

*Kindergarten children from the Denver Indian Center at "Native Harvests: Plants in American Indian Life."*



## Native Harvests: Plants in American Indian Life

Sunday, March 3, will be the final day for viewing the Smithsonian Institution's Exhibit, "Native Harvests: Plants in American Indian Life." Saturday and Sunday, March 2 and 3, will be your last opportunity to see the films that have been showing in Classroom C. If you were unable to see the exhibit or the films earlier, now is your chance. The exhibit is open from 9 a.m. to 4:45 p.m. daily. The film schedule is as follows:

1:30 p.m. *Mohawk Basketmaking: A Cultural Profile*  
28 minutes

This beautifully photographed film presents the black ash splint basketry tradition of the Mohawk tribe on the St. Regis reservation. Harvesting, refining, and working the splints into diverse baskets are covered.

2:00 p.m. *Beautiful Tree—Chiskale*  
20 minutes

The Southwestern Pomo of California call the tan oak "Chiskale," meaning "Beautiful Tree," as the acorns were essential to the food economy. From oral traditions and memories of present-day Indians,

this film reconstructs and demonstrates the making of acorn bread.

2:30 p.m. *Wigaasjimaan: Ojibwa Birch Bark Canoe-Making*  
36 minutes

Made by the Saginaw band of the Chippewa Indians, this film shows the process of making a birch bark canoe, from stripping the bark to floating away on the finished canoe. It is narrated in Ojibwa with English subtitles.

3:15 p.m. *Hopi: Songs of the Fourth World*  
60 minutes

This spectacular film highlights the breadth and spirituality of the Hopi world, interviewing numerous Hopi peoples about their lives. The film demonstrates the continuing importance of corn in the Hopi culture.

Remember there is no fee for admission other than the standard non-member gate admission. Don't miss this opportunity to learn more about the close relationship native Americans had and continue to have with their surrounding plant communities.

be available throughout the afternoon to answer your questions during scheduled breaks.

An intermission will be provided during the afternoon and refreshments will be served. Admission to the symposium is free, however, there is a gate admission fee for non-members of Denver Botanic Gardens. For additional information on the agenda of this timely symposium, please call Joan Franson, 424-3942.

## Annual Rose Symposium

Denver Rose Society's annual Rose Symposium will be held on Sunday, March 10 in DBG's John C. Mitchell II Hall, from 1 to 4:30 p.m.

This symposium provides rose growers with an opportunity to learn more about the planting, watering, and general care of roses (including miniature roses), the conditioning required for showing roses, and the techniques of photographing roses. Knowledgeable rosarians will

## New Horticultural Therapy Intern

A new horticultural therapy intern began working at the Pauline A. and George R. Morrison Horticultural Demonstration Center on February 1. David Hackenberry, a student from Kansas State University, will assist DBG Horticultural Therapist Judy Carrier until July 31.

During his six-month internship David will be helping with the continuing development of the Morrison Center sensory garden, designing and implementing a horticultural therapy program for local service agencies, and providing tours for groups who are part of the horticultural therapy program here.



In addition, he will gain some unique experience in helping to plan the 1985 annual meeting of the National Council for Therapy and Rehabilitation through Horticulture which will be held at Denver Botanic Gardens this summer.

Judy is looking forward to exchanging horticultural therapy information with David and assisting him in advancing his educational experiences. She adds that, "internships are a valuable component in the body of knowledge that all horticultural therapists share."

*New Horticultural Therapy Intern David Hackenberry.*

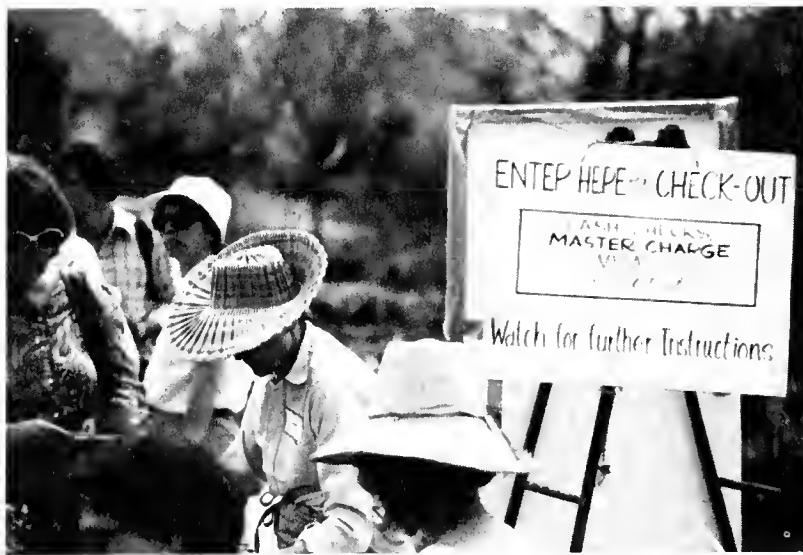
## 4 | DBG Volunteer Wins Xeriscape Garden Contest



The Xeriscape Metropolitan Denver Board of Directors announced in January the winner of the Xeriscape Create-A-Garden Contest. Nicole Bres, a native of France who is currently living in Denver, received the grand prize for her garden design. Nicole is a very active volunteer at DBG who spends four hours every day working with our greenhouse staff. Nicole (center) is receiving her award from Ed Gerrity (left) of Delta Airlines, and Jim Grabow, Xeriscape Voluntary Program Chairman. Congratulations Nicole!

### Plant Sale Volunteers Needed

Denver Botanic Gardens' Annual Plant Sale owes its existence to the energy and dedication of volunteers. This year assistance is needed in pricing plants, setting up for the sale, selling plants, and operating the cash registers. Please call Lydia Toll, 333-1655, if you can help, in any way, at the 1985 Annual Plant Sale which will be held May 10 and 11.



### Wanted: Outdoor Guides

Denver Botanic Gardens is offering a 10-week Guide Training Course for volunteers who wish to conduct educational tours of the Outdoor Gardens. The course will be held from 9 a.m. to noon on Tuesdays in Classroom C beginning March 26. This comprehensive course will prepare guides to lead visiting adult and youth groups on informative tours of our outside garden areas.

All areas will be covered in this course, from the Morrison Horticultural Demonstration Center to the Rock Alpine Garden. Participants will learn about the gardens including the Japanese, Herb, Perennial, Rose, and Plains Gardens as well as the Community Gardens and gardens under construction. Specific plantings and plant groups



will be discussed, but participants can also learn about the design concepts and horticultural purposes behind the many different gardens.

A variety of topics will be covered by a line-up of expert speakers who will combine classroom lectures with outdoor tours. The class fee is \$25 and includes a notebook complete with historical and botanical information.

Upon completion of the course the new guides will join the dedicated group of active guides in leading tours on a monthly, bi-monthly, or weekly basis beginning May 1 and

concluding October 1. All current outdoor guides are invited to use these training sessions as an opportunity to "brush-up" on your presentations before the busy season commences.

If you are interested in learning about Colorado plants and different types of gardens and if you enjoy meeting the public and working with people, then use the Education Department registration form on page eight to register for this informative series of classes. Questions may be directed to the Education Department, 575-3751 ext. 20 or call Diane Ipsen, 333-7813.

Guiding is a rewarding experience, as well as being educational and enjoyable. If you have the time and desire to volunteer sign up now as class size is limited.

### Monthly Rose Society Meeting on March 14

The March meeting of the Denver Rose Society will be held on Thursday, March 14 at 7:30 p.m. in the Denver Botanic Gardens House. An illustrated discussion will be provided by Melinda Campbell on "High Country Roses." Guests are welcome to attend.



The Colorado Cactus and Succulent Society will present its Annual Show and Sale at Denver Botanic Gardens in John C. Mitchell II Hall. Visitors are welcome to attend the event on Saturday, March 23 and Sunday, March 24 between the hours of 9 a.m. and 4:45 p.m.

This show features plants from Society members' collections, with representatives of succulent plant families and genera from around the world. Included in these displays will be information on habitats, nomenclature, and morphology. For the first time, members can enter their prized specimens in a judged competition.

Members will be found in the sale area providing assistance to visitors

with their selections and answering questions on cultural requirements. A series of mini-lectures will be conducted hourly through the entire weekend. Topics include cultural techniques, propagation, and winter-hardy gardens.

The sale will feature a large and varied selection of labeled cacti and succulents, including both indoor and winter-hardy varieties. In addition, potting materials, T-shirts, aprons, and seeds will be available for purchase. A new feature this year provides an area where visitors can design and arrange, with assistance and the proper materials, their own dish gardens.

The Colorado Cactus and Succulent Society meets monthly to

exchange information on culture, plant identification, and conservation. Guests are welcome to participate in these meetings or attend the lectures sponsored by the Society at the Gardens.

An interpreter for the hearing impaired will be available both days. There is no charge for this show other than the standard non-member gate admission. Patrons are reminded that a portion of the proceeds from this Annual Show and Sale is given to Denver Botanic Gardens.

## Great Getaways

Our tour of the Great Lakes region will visit public and private gardens and museums in and around Cleveland, Chicago, and Detroit. Please note that the date of departure has been changed to September 8 returning September 21, 1985.

A wandering alpine adventure scheduled for June 7 to 25, 1986, will find us visiting new areas of Europe, both in the mountains and valleys. Expect to see alpine flowers in profusion on this trip.

Grand Teton and Yellowstone National Parks is our exciting offering for August 16 to 24, 1986. Horseback riding, river rafting, and botanizing are all included.

For additional information, please call Andrew Pierce, Assistant Director, at 575-3751, ext. 18.



Freddy the jaguar enjoys a break during the filming of our current public service announcement in our Conservatory.

## Ukrainian Easter Eggs

**Saturday, April 6**

(one session)

**Classroom B 9 a.m. to noon**

Ukrainian Easter egg decorating, or *pysanky*, is a centuries-old technique of creating intricate and brilliantly colored patterns on eggs. The process is similar to that used in batik: designs are drawn with molten wax and are over-dyed.

Please bring a candle, rubber gloves, and three or more uncooked jumbo or extra-large eggs to class; all other materials will be provided.

**Instructor:** Peggy Johnston studied art education at the University of Wyoming and Western Wyoming Community College. She has extensive teaching experience and her work is shown widely throughout Wyoming and Colorado.

**Fee:** \$14 members/\$15.50 non-members (includes \$2 for materials).

**Limit:** 20



## Basketry Techniques

**Thursdays, March 14, 21, (skip March 28), April 4, 11, 18**

**Section I: 12:30 to 4 p.m. except March 14 when the class meets until 4:30 p.m.**

**Section II: 6:30 to 10 p.m. except March 14 when the class will begin at 6 p.m.**

**(five sessions) Classroom B**

**Please indicate your section on the registration form.**

Learn the traditional Appalachian hen basket and some of its variations. These gracefully-shaped baskets originated in Scotland and came to America with the Highland settlers. Students will learn this rib and split technique in a variety of shapes and can expect to complete one basket each session.

No previous experience is necessary. Please bring pruning shears, sharp knife, and towel to class.

**Instructor:** Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

**Fee:** \$95 members/\$105 non-members (includes a \$35 materials fee for the construction of five baskets).

**Limit:** 10

## Advanced Wheat Weaving

**Mondays, March 11, 18 (skip March 25), April 1, 8**

**(four sessions)**

**Classroom B 7 to 9 p.m.**

This series of workshops is a continuation of the wheat weaving course held last fall. Advanced techniques for larger, more complicated projects such as house blessings, brides-of-corn, and harvest dolls will be taught. Experience with different grains such as Italian and brown bearded wheat, oats, and barley will be provided.

Either the instructor's consent or previous enrollment in a wheat weaving course is necessary. Please bring scissors and a ruler to class.

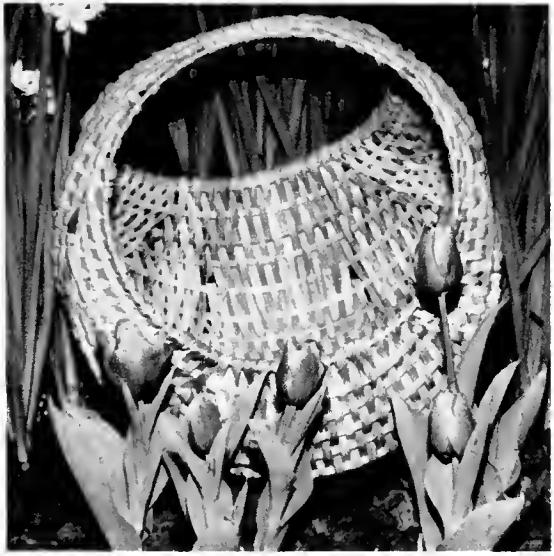
**Instructor:** Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Garden and DBG.

**Fee:** \$46 members/\$51 non-members (includes a \$14 materials fee).

**Limit:** 12



*Ada Murnane and Myroslaw Kalba in last year's Ukrainian Easter Eggs class.*



*Basket by  
Robin Taylor  
Daugherty*

## Make Your Own Easter Basket

**Section I:** Saturday, March 9

**Section II:** Friday, March 15  
(one session)

9 a.m. to 4 p.m. Classroom B

Please indicate your section on the registration form.

Start a family tradition by creating your own handmade Easter basket from natural reed. Wrap its handle and decorate it appropriately. Students will complete one basket in this all-day class.

No previous experience is necessary and participants should bring a sack lunch and pruning shears, sharp knife and towel to class.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials).

**Limit:** 10

## All About Annuals

Wednesdays, March 6, 13, 20, 27

(four sessions)

Classroom A 7 to 9 p.m.

Annuals are extremely versatile garden plants with hundreds of available selections. They provide cut flowers and color and offer the opportunity to re-design a different garden each year. This class will include detailed information on species, hybrids, and cultivars along with design and culture considerations.

**Instructor:** Gayle Weinstein is a botanist horticulturist at DBG and oversees all aspects of the outdoor plant collections. She has taught horticultural subjects at Ohio State University and the Aurora Public Schools Technical Center.

**Fee:** \$32 members/\$35 non-members

*Ukrainian  
Easter Eggs by  
Peggy  
Johnston*

## Gardening for Results

Saturdays from 10 a.m. to noon  
DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue. Please indicate your program titles if you are not attending the entire series.

Professional horticulturists will present the background and techniques needed to achieve beautiful and bountiful gardens in this series of seven two-hour programs. Attend them all or choose those that suit your specific needs.

### Saturday, March 23 Grow Your Own Bedding Plants

Learn how to choose appropriate varieties, containers, and soil as well as the proper techniques of timing, seeding, and transplanting. Specific light and temperature requirements for seedlings will also be covered.

### Saturday, March 30 Soil Preparation



What are appropriate soil amendments for Colorado soils? When should you double dig or rototill? Is there a difference between organic and chemical fertilizers? The answers to these questions will enable you to "dig right in."

### Saturday, April 6 The Small-Space Vegetable Garden

Techniques such as wide row spacing, successive planting, and intercropping will help you grow more produce in your city garden than you ever thought was possible. Learn sources of appropriate varieties.

## Saturday, April 20 Botany for Gardeners

Knowing basic floral structure and plant parts will help you understand proper horticultural practices. Take the mystery out of wilting, bolting, sunscald, and deep watering.

### Saturday, April 27 Composting

Learn how to take leaves, grass clippings, small prunings, and other refuse and pile them in such a way that soil bacteria can thrive and break them down into a usable form to enrich your garden soils.

### Saturday, May 4 All About Tomatoes

Everything you need to grow our favorite garden vegetable will be presented. Topics include determinate and indeterminate varieties, planting, pruning, fertilizing, and problems such as aphids, whiteflies, sunscald, and blossom end rot.

*DBG Plant Propagator Jim Borland*

### Saturday, May 18 The Culinary Herbs

This class is an introduction to the culture and uses of the cooking herbs. Plan an herb garden or use them to accent your annual beds or perennial borders.

**Instructors:** Jim Borland, Pat Pachuta, Lynn Thompson, and Gayle Weinstein are all horticulturists on the staff of Denver Botanic Gardens and John Brett is the former coordinator of our community gardening program.

**Fee:** Each program is \$8; choose three for \$20 or attend all seven for \$48.

## Classic Egg Feature

Saturday, April 6

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Join this egg-decorating party for kids. Create an egg with eyes that move or colors that glow and glitter. Use flowers, sequins, and beads to create a classic egg treasure. Hunt for an Easter prize in the Gardens. Please bring three hard-boiled eggs to class.

**Instructor:** Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12



*Jo Cannon helps Molly Nygaard into a Mexican bamboo belt.*

**Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206**

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

## The Pharaoh's Letter

Saturday, March 9 and 16

(two sessions) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Journey to the land of pyramids and learn about the ancient plants of the pharaoh's Egypt. Learn how paper is made from papyrus, the tall reed that grows on the banks of the Nile. Become a scribe and make hieroglyphics, the picture words of pharaoh's letters. See the trees mummy cases were made of and discover why the palm tree is called the sacred fruit of the desert oasis.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$13 members/\$14 non-members

**Limit:** 12

## Stickly Pricklies

Saturday, March 23

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Explore the desert world of cacti and other succulents. Discover how plants without leaves use their spines to guard water storage and collect the night's dewdrops. See the wooly beard of the Old Man Cactus and wonder at the living stones.

Find out the bat's favorite nocturnal flowers and see which cactus has an apartment for birds. Learn the art of cactus grafting and take your creation home.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$8 members/\$9 non-members

**Limit:** 12

## Munch, Crunch

Monday, March 25

(one session)

For children of ages 5-7

Classroom A 3:30 to 5:30 p.m.

Take a journey into the world of carnivorous plants. Learn how a Venus fly trap "counts" to catch an ant, how the pitcher plant creates a deadly pond, and how the sundew tricks a bug. Each child who ventures into this garden will receive his own Venus fly trap.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$8 members/\$9 non-members

**Limit:** 12

©1985  
JoDuranceau Cannon



*Jennifer Pervich demonstrates its percussive potential.*

## Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

# L I B R A R Y

Helen Fowler Library  
Volume 8, No. 1  
March 1985  
Edited by  
Jean Williams  
  
E  
Librarian:  
Solange Gignac

## Reflections of Nature: Flowers in American Art

By Ella M. Foshay. Alfred A. Knopf  
in association with the Whitney  
Museum of American Art, New  
York, 1984. \$29.95. N 6505 F6. 1984.



Depth of scholarship always tells but seldom as gracefully as it does here. *Reflections of Nature: Flowers in American Art* is both beautiful and substantial. If you are tempted to buy it, either for yourself or another—yield. You will not be disappointed.

Alfred A. Knopf, reliable as ever in matters of quality, published this book in the spring of 1984 in association with the Whitney Museum of American Art on the occasion of a major Whitney exhibition by the same name. Both the exhibition and the book were conceived, organized, and written by Ella M. Foshay, member of the Vassar College Department of Art, and both also derived from an earlier incarnation as a doctoral dissertation by the author.

The book is valuable to different people for different reasons—to a practicing artist whose main inspiration is floral, to a serious art history student looking for a reliable overview of flower art, to collectors, would-be connoisseurs or dealers in flower-inspired art, as well as to a passionately curious general reader fascinated by the interrelationships and interactions of scientific, cultural, and philosophical conceptions of nature through the centuries.

The book is written with an attitude of awareness and high seriousness about the ultimate concerns of art. An introductory essay by Barbara Novak, Professor of Art History, Barnard College and Columbia University, who is described by the author as "scholar, mentor, and friend," skips smartly about among the sometimes complex philosophic ponderings of artists and art criticism through the ages, alighting finally at a position positing American flower painting as one of the "great" traditions situated somewhere between the immediate sensuousness of the 17th century Dutch tradition and the celebrated Oriental awareness of the "ch'i, breath, spirit" of the natural world.

"One is tempted to resort to the flowery language of the Victorians: the flower is life incarnate," she says. But she goes on to lay more of the responsibility for this uniquely American tradition at the feet of Emerson and "the strong transcendental strain that permeated American art and literature in the 19th century and that continues to resonate in the 20th."

The central essay is a bright, lively, detailed, and documented investigation by the author of the same theme—which she traces

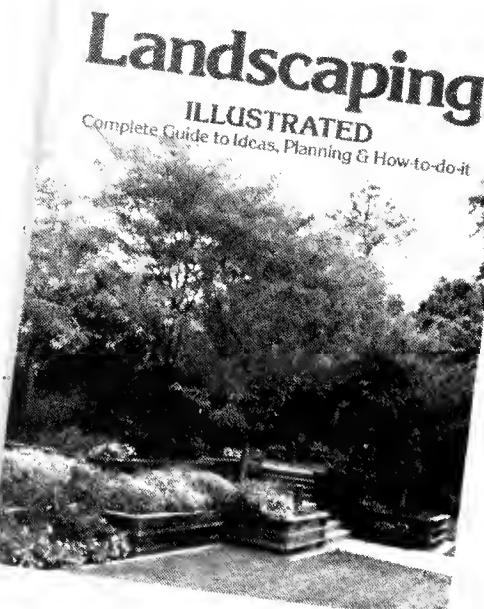
through its European background to the origins of flower imagery, through 19th century images and attitudes (including a fascination with Darwinian correspondences) into a lively discussion of the stylistic tastes and philosophical leanings of 20th century American flower artists.

This book is brilliantly pictorial as well as thoughtfully written. It is a complete delight to the lover of flowers or floral art.

Jean Williams

## Sunset Landscaping Illustrated: Complete Guide to Ideas, Planning & How-to-do-it

By the Sunset Editors. Lane  
Publishing Co., Menlo Park, Calif.,  
1984. \$9.95. SB 473 S86Su 1984.



Most people have a feeling for what they want from their landscapes, large or small. How to accomplish this is the thorn on the rose—this book can help. It presents vital planning guidelines and

### THE REVIEWERS

Gwen Kelaidis—An avid gardener who freelances in design and nursery consulting

Hazel Kellogg—Volunteer in Helen Fowler Library, Denver Botanic Gardens

Marie Orlin—Amateur gardener employed by Neils, Lunceford Landscaping in Silverthorne, Co.

Steven Swenson—1984 Summer Intern, Oregon State University

Jean Williams—Volunteer in Helen Fowler Library, Denver Botanic Gardens

explains how to start with what you have now and how to go on to what you want in the future.

It also provides inspiration. The first 30 pages of the book are devoted to a photographic gallery of the magnificent gardens we have to come to expect from California.

"Before any worthwhile project is begun," we are told, "there is first a dream."

What the book does not explain, however, is that to create the finished look of the "after" photos requires more dedication, devotion, time, and money than the average weekend gardener can devote to the project.

A large chapter in the book, "Selecting the Plants," contains a plant encyclopedia and a plant selection guide. The final third gives good, general directions for the installation of architectural features, from basic edgings to elegant ponds.

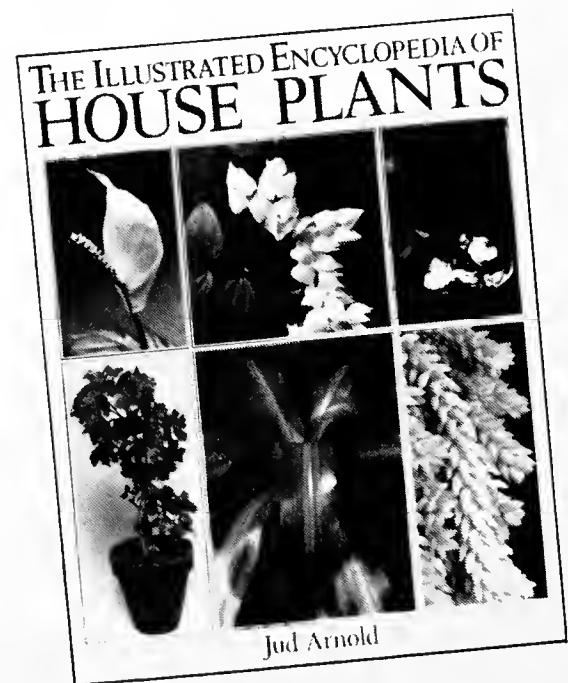
The encyclopedia is a useful overview of plants that work a variety of landscape designs. Other texts, however, do offer better references on plants suitable to our climate and soils, and on their local planting requirements.

Many of the landscapes and structural features Sunset suggests may be out of reach for some gardeners, but the basics discussed in the book show the way to begin. A good idea of what you want, followed by a detailed plan, is your first step.

Marie Orlin

### *The Illustrated Encyclopedia of House Plants*

By Jud Arnold. Dodd, Mead & Company, Inc., New York, 1979. \$11.95. SB 419 A7 1982.



Jud Arnold's single-volume encyclopedia of house plants, now available in paperback, is a good reference guide to a wide range of indoor plants. The 223-page manual is divided into three sections to aid the reader's use. Part One beautifully illustrates and gives information on the origin, habitat, and culture of many popular contemporary house plants.

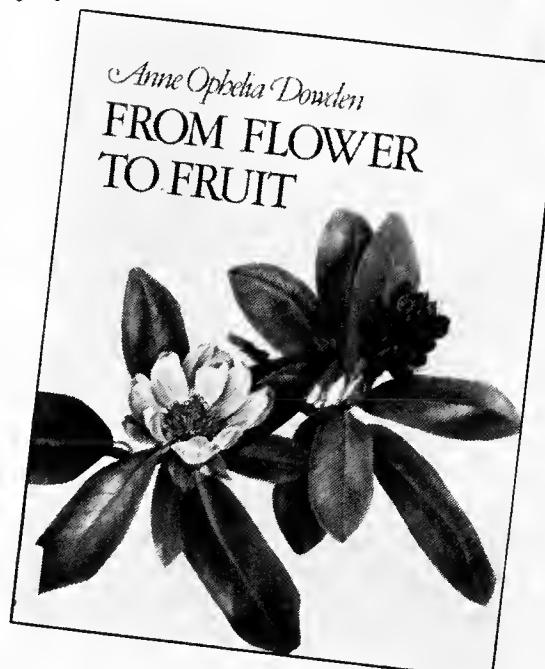
Part Two is a basic indoor gardening guide that covers 20 topics ranging from potting soils, house plant pests, and vacation care tips on terrariums, bonsai culture, kitchen herb gardens, and other subjects of general interest. Part Three includes a brief glossary of indoor gardening terms and an index that cross references scientific and common names.

This book is not an exhaustive study of house plants, but it is a credible, well-organized, illustrated practical reference guide.

Steven Swenson

### *From Flower to Fruit*

By Anne Ophelia Dowden. Thomas Y. Crowell, New York, 1984. \$13.50. j QK 827 D6 1984.



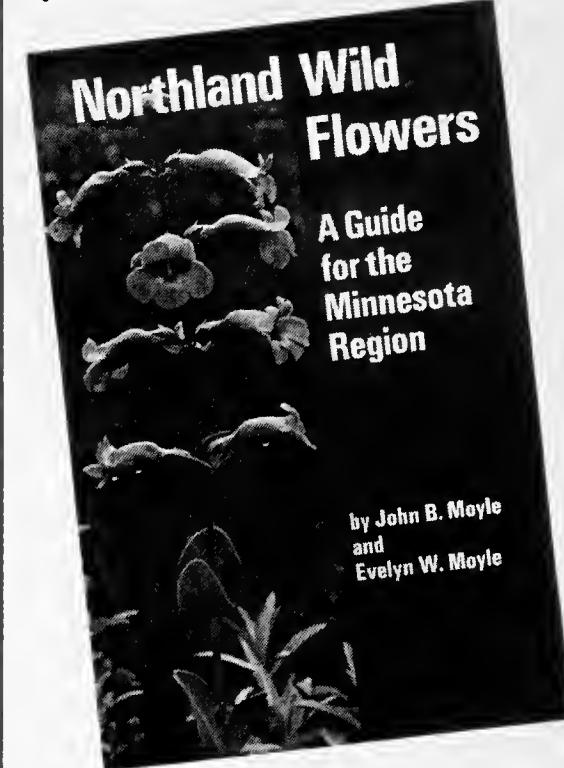
The many processes by which various species develop from flower to fruit to seed are beautifully illustrated and described here in simple but precise language that young readers can understand and adults can appreciate as well. More than 150 fruit forms drawn directly from plants gathered from all over the world reveal the many intricate inner processes of life in their most elemental forms.

Ms. Dowden is recognized as an excellent botanical illustrator. She has produced seven books on botanical subjects as both author and illustrator.

Hazel Kellogg

### *Northland Wild Flowers: A Guide for the Minnesota Region*

By John B. Moyle and Evelyn W. Moyle, University of Minnesota Press, Minneapolis, 1977. \$12.95. QK 168 M64



Here's a picture guide for the visitor to the Upper Midwest. If you want to know the name of that new flower, you can probably find it with this book. Supposing you have no botanical training, a simple chart will lead you to roughly the right section of the book. The common and conspicuous wild flowers are all pictured here in color photographs, a few of which are truly beautiful, and almost all of which serve the purpose of showing flower form, leaf shape, and general habit of the plant. Botanical terms are kept to a minimum in the text, but Latin names are given, and the arrangement of species is by plant family.

Perhaps the nicest feature of this useful book is the introductory section, which guides us to the best wild flower haunts of Minnesota, and even includes a calendar of natural wild flower displays across the state. Lots of interesting details of plants' life histories and their interactions with human civilization are included, making this a very readable work.

Gwen Kelaidis

## Gardening Tips for March

Pruning is a science and an art requiring skillful techniques to shape, train, control, and stylize plant growth. Although individual tastes often dictate the outcome, there is research that gives guidelines for pruning trees and shrubs. Understanding how plants respond to pruning is the key to understanding proper techniques.

It is important to recognize that the growth of any one part of a plant is not independent of another. In addition, there are many centers in the plant potentially capable of growth, even though growth at any one time is restricted to a few of them.

A good time to observe the stems and buds is during the dormant period. You will notice, for the most part, that the terminal buds tend to be larger than the lateral ones. When these buds emerge there seems to be an order to their development. If the terminal bud is removed either the chemical inhibitors are removed or the concentration of hormones is redistributed. If the terminals were to remain, the buds immediately below may lie dormant for years.

With this in mind, it is easier to understand how and why plants respond to the various types and locations of cuts.

In general, there are two kinds of pruning: heading and thinning. Heading is a technique whereby the current growing shoot is cut back to a lateral bud or an older branch is cut back to a stub or twig. New growth develops from one or more buds immediately below the cut. The lower buds usually do not grow and the new growth is vigorous and dense. Types of heading are: tip pruning, shearing, and stubbing.

Thinning is the removal of a lateral branch to its point of origin or the shortening of a branch by cutting it back to a lateral branch large enough to assume the terminal role. Thinning distributes the growth more evenly and the plant retains its natural form. In addition, the growth is less vigorous with thinning than with heading.

Pruning, by itself, is a paradox. While it enhances new shoot growth and stimulates plant development it may also reduce overall plant growth. Roots and shoots are mutually dependent. The shoots manufacture carbohydrates, vitamins, and other growth substances whereas the roots absorb water and minerals. By removing some top growth, roots can supply

more water and minerals than before and individual shoots can grow more rapidly. However, if the roots are pruned, there will be less water and minerals available and the vigor will decrease as will the overall growth.

In addition, if the top is pruned, there is less overall leaf surface for the manufacturing of hormones, carbohydrates, and other vital components. The supply to the roots is diminished, therefore, there is less root initiation and overall growth is lessened.

There are exceptions: Older plants that flower heavily on one-year old wood may not be dwarfed. If they are pruned when dormant, new flower buds are not formed, but more leaves will be produced resulting in greater leaf area for photosynthesis.

Plants that flower on current season's wood also respond well to dormant pruning by producing more vigorous shoots with more flowers. The roots are able to continually grow supplying additional water and minerals.

When is the best time to prune? This depends on the plant and the results you want to achieve. Light

pruning can take place almost any time. In general, the best time to prune is prior to rapid growth in the spring, but not after the buds swell. However, plants that tend to bleed more readily at this time should be pruned in late fall or early winter. Pruning too early in the fall may create a haven for sporulating fungi.

Pruning when temperatures are 0°F or below may reduce the hardness of tissues, especially on conifers. Roses or plants that are subtropical in nature should not be pruned in late fall or early winter as new growth can be stimulated during warm spells only to be damaged when the weather changes.

Plant development can be curtailed if pruning occurs right after growth is completed. However, if maximum containment is desired, pruning should occur from spring to mid-summer.

With these conditions and many more that have not been mentioned, you must have surmized that pruning involves a great deal more than an artful eye. It requires good judgment, an understanding of plant responses, and systemized methods to elicit the desired results.

Gayle Weinstein  
Botanist Horticulturist at  
Denver Botanic Gardens



# MAR

## Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

*Address correction requested*

# A

S

3

10

Rose  
Symposium

17

24

31

# L

M

4

11

18

25

Coming Next Month

# E

T

5

12

19

26

April 6  
The Small-Space  
Vegetable  
Garden,  
Ukrainian

# N

W

6

13

20

27

Easter Eggs,  
Classic Egg  
Feature

April 20  
Botany for  
Gardeners

# D

T

7

14

Basketry  
Techniques

21

Spring Begins

28

April 27  
Composting

# A

F

1

March 1-3  
Native  
Harvests:  
Plants in  
American  
Indian Life

8

# R

S

2

March 2 and 3  
Native  
Harvests Films

9

Special Plants  
for Special  
Places

The Pharaoh's  
Letter

16

March 16  
and 17  
Dutch Floral  
Design Show

23

March 23 and 24  
Cactus and  
Succulent  
Show and Sale  
Plants, Sticky  
Pricklies

30

March 30  
and 31  
African Violet  
Show and Sale  
Soil  
Preparation



March 1985

TIME VALUE

Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

Address correction requested

# Green

# Thumb

# N

# E

# W

# S

## 1985 Plant Sale Extravaganza Set for May 10-11



Are you tired of just talking about gardening? Are you bored thumbing through seed catalogues over and over again and dreaming?

Take heart.

Denver Botanic Gardens' Annual Plant and Used Book Sale—our answer to the winter "blahs" and your Mother's Day gift-giving needs—will be held on Mother's Day weekend, Friday, May 10 and Saturday, May 11, from 9:30 a.m. to 5:30 p.m. both days.

As in past years, we offer the largest and most diverse selection of plants in Colorado—everything from annuals and ageratum to perennials and penstemons. Throughout the sale area you will find herbs, geraniums, orchids, hibiscus, gypsophila, daisies, delphiniums, daylilies, phlox, peonies, and lots of peppers and tomatoes.

If you are ready to start planting, go directly to the Annuals Booth and pick up petunias, marigolds, verbenas, begonias, impatiens, and pansies—just to name a few.

And as if this weren't enough the Helen Fowler Library Used Book Sale will be held in the basement of the library during sale days.

Have you been searching for that out-of-print copy of Agatha Christie's *Murder on the Orient Express*? Do your children beg for the 1965 Ace Books edition of *Tarzan and the Antmen*? Our sale of previously-owned books is a good place to start your search. Librarian Solange Gignac says that this year's sale will feature an unusually large number of fine gardening books.

Denver Botanic Gardens

April 1985

Number 85-4

Inside:

Adult classes,  
pages 3-5

Classes for  
Kids, page 6

Christopher Barnes at the 1984 Annual Plant and Used Book Sale

Make plans to spend a lazy morning or afternoon browsing through the unequaled selections at the Annual Plant and Used Book Sale. Treat yourself to a plant and a good book.

### Plant Donations Needed

A Plant Donations Booth is a regular feature of the DBG Annual Plant and Used Book Sale. This booth is designed to solve a multitude of gardening needs—from new to mature gardens.

Perennial gardeners are encouraged to divide their overgrown specimens and donate the extra plants for our sale May 10 and 11.

Pot these plants as carefully and early as possible, identify each, and *continued on page 2*



Mark your calendar for September 7 to 21 when a small group of fortunate people can enjoy an exciting escape to the Great Lakes region.

This excursion into our country's wealthy and horticulturally prominent midsection offers an opportunity to see a variety of estates, gardens, and museums just at the beginning of autumn.

In addition to enjoying Indian summer and listening to Lake Michigan lapping against the shores of Illinois and Michigan, you will be able to visit numerous cultural locations. Some of the finest botanical gardens are on this get-



away including Morton and Holden Arboreta, Chicago Botanic Garden, The Garden Center of Greater Cleveland and Western Reserve Herb Society Garden, Mitchell Park Conservatory, Kingwood Center, and Cranbrook House and Garden.

Additionally, the tour itinerary leads you to the Cleveland Art Museum, Detroit Institute of Art, John G. Shedd Aquarium, and a variety of Chicago museums. You can step back into history on Mackinac Island, in Greenfield Village, at the Henry Ford Museum, and the Sault St. Marie Locks.

Also mark Sunday, April 28 as the day you can preview the tour. At 3:30 p.m. a slide presentation in the DBG House at 909 York Street will highlight this future getaway. Remember these dates and call Andrew Pierce, Assistant Director, 575-3751 for more details.

## From the Director: "Circle 17" Returns for 1985

Seven "Free Days" in 1985 for Denver residents have been announced:

Wednesday, April 17  
Friday, May 17  
Monday, June 17  
Wednesday, July 17  
Tuesday, September 17  
Thursday, October 17  
Sunday, November 17

I encourage all Botanic Gardens members to bring, as their guest, a non-member Denver resident to visit on one or more of these free days. It is the ideal time to introduce the joys and privileges of a Botanic Gardens membership to those who may be unaware of all that the

Gardens has to offer as well as a pleasant way to share a special experience with a friend or acquaintance. So mark your calendars, by circling the 17th day of every month, except August and December, for the remainder of 1985 and bring a Denver-resident guest to the Gardens.

Merle M. Moore  
Executive Director

## Plant Donations (cont.)

bring them to the Plant Donations Booth at Denver Botanic Gardens on Thursday, May 9. Your donations will make colorful, hardy additions to developing and new gardens, and you will have made a tax-deductible gift to DBG. If you have any questions, call Dorothy Scott at 526-0726.

## Bookworms and Philatelists Take Note

With a month left until our Annual Plant and Used Book sale, the library is eagerly accepting books—new and used. The librarian, Solange Gignac, has also asked for contributions of cancelled foreign stamps which will be sold at the book sale. If you have any questions, call the librarian at 575-3751.

## Tributes

- In Memory of Mrs. J. L. (Virginia) Adams**  
Mr. & Mrs. Stuart Hawkins  
Dorothy Kalmbach
- In Memory of Florence L. Behde**  
Margaret Rupp
- In Memory of Jack Eyler**  
Mr. & Mrs. Jack Lutz and family
- In Memory of Richard Girouard**  
Alice Barnum  
Syd Glick
- In Memory of Harry Kelly, Jr.**  
Mr. & Mrs. Charles C. Nicola
- In Memory of Anne Noyes Johnson**  
Mr. & Mrs. James M. Smith, Jr.
- In Memory of Kyle Pusher**  
Morning Belles Garden Club
- In Memory of Maurice Pulman**  
Mary Behner  
Marge & Don Belden  
Faye Carey  
Barbara Eaton  
Friends in the Department of History  
at University of Denver
- In Memory of Melvin Roberts**  
Mr. & Mrs. John C. Livingston  
Ken & Betty Wasmundt
- In Memory of Charles C. Nicola**

## Green Thumb News Number 85—4 April 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than March 20 for May, April 19 for June, and May 20 for July.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.

# COURSES

**Spring  
1985  
Denver Botanic Gardens**



## **Mushroom Identification**

**Wednesdays, May 8, 15, 22  
(three sessions)**

**7:30 to 9:30 p.m. Classroom C**

This course will present a new and simplified approach to mushroom identification for beginners, while providing a firm base for those who may wish to pursue the subject in more depth in the future.

Three slide-lecture sessions will cover structure, growth, habitat, and seasonality of mushrooms as well as information on toxicity and edibility. The use of field guides and keys will be demonstrated and recommendations will be given on those most useful in our area.

The main emphasis will be spring-fruiting mushrooms of the city and lower elevations. Collecting, cleaning, preparation, and cooking hints will be provided.

Handouts will be given but students should be prepared to take additional notes. Participants will learn to positively identify more than 20 common edible, non-edible, and poisonous species. An optional field trip will be scheduled according to local mushroom fruiting times.

**Instructor:** Marilyn Shaw lectures and teaches extensively and has been active in the Colorado Mycological Society for 12 years. She has studied with Alexander Smith, Harry Thiers, and Orson Miller, Jr., as well as many other prominent mycologists. Marilyn is a consultant in mushroom identification for Denver Botanic Gardens and Rocky Mountain Poison Center.

**Fee:** \$24 members/\$26 non-members

## **Beginning Bonsai**

**Thursdays, May 16, 23, 30**

**(three sessions)**

**7:30 to 10 p.m. Classroom B**

This introductory course will cover the historical and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting, and general care of bonsai in Colorado will be included.

Each student will take a completed bonsai home. All materials including a text will be provided.

**Instructors:** Keith Jeppson, past president of Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 13 years. Harold Sasaki is a commercial bonsai grower, and an experienced bonsai hobbyist of 15 years.

**Fee:** \$47 members/\$52 non-members (includes a \$17 materials fee).

**Limit: 20**

## **Aquatic Plants for Your Garden**

**Saturday, April 27**

**9 a.m. to noon Classroom C**

Learn the cultural requirements of tropical and hardy water lilies, bog plants, and other "floaters." Garden design, including pool construction and half-barrel displays, will be covered and students will learn the details of propagating water lilies from seed. Experience the excitement of the grandest water lily of all—the Victoria water lily, *Victoria amazonica*.



**Instructor:** A Gardener Florist II at Denver Botanic Gardens, Joseph V. Tomocik maintains our Aquatic Plant Display. He will be assisted by Richard Brune, a gardener with much experience with aquatic plants.

**Fee:** \$12 members/\$13 non-members

## **Botany for Beginners**

**Saturdays, June 8, 15, 22, 29**

**(four sessions)**

**9:30 to 11:30 a.m. Classroom B**

This is a course for those who have no background in botany but wish to know more about plant parts and what they do. This skill is fundamental if you wish to learn how to identify plants. It will also help you appreciate what plants require.

**Instructor:** Moras L. Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience. This course was very popular when it was first offered in February 1985.

**Fee:** \$32 members/\$35 non-members

**Limit: 15**

## **Botanical Illustration— Spring Unfolds**

**Tuesdays, April 9, 16, 23, 30, May 7**

**(five sessions)**

**9:30 to 11:30 a.m. Classroom B**

In this introductory course, you will learn how to draw spring plant materials such as daffodils and tulips as the season progresses. Choose plants from DBG or your own garden and study their growth from swelling bud to leaf or blossom. These and other drawings will increase your observation skills and heighten your enjoyment of spring.

**Instructor:** Angela Overy received her National Diploma of Design from London University, England.

Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

**Fee:** \$46 members/\$52 non-members

**Limit: 20**



## Plant Life Field Trip: Red Rocks Park

**Wednesday, April 17**  
**9 a.m. to 4 p.m.**

This is an opportunity to observe some of the delightful early spring wildflowers of Red Rocks Park. Easter daisies, pasqueflowers, and some of the mustards should be in flower. Bring a lunch.

**Leader:** Mary Edwards is an enthusiastic botanist who volunteers in the Kathryn Kalmbach Herbarium at DBG.

**Meet:** at 9 a.m. at Denver Botanic Gardens House to carpool and share gasoline expenses.

**Fee:** \$2 per person

**Limit:** 20



*Bob Heapes leads a group at Roxborough State Park.*

## Wildflower Field Trip: Surprise Location

**Saturday, May 4**  
**9 a.m. to 2 p.m.**

The capricious nature of Colorado's weather makes it difficult to determine the best location to observe good displays of spring wildflowers. Rest assured, however, that our leader has promised to scour our region beforehand to determine the best botanical site.

Bring a sense of adventure, your lunch, and drinking water.

**Leader:** Richard Schwendinger has been botanizing and leading field trips throughout North America and Alaska for over 25 years.

**Meet:** at 9 a.m. in the DBG House parking lot to carpool and receive directions.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 20

## Field Trip to Roxborough State Park

**Saturday, May 18**  
**9 a.m. to noon**

Learn spring wildflower identification at this spectacular park. An easy trail winds through striking geologic formations where a wide variety of habitats including sunny, open hillsides, hogback ridges, and a moist stream valley will be explored.

Please come prepared and bring drinking water, a snack, sensible, waterproof walking shoes, and a jacket.

**Leader:** Bob Heapes is an experienced field trip leader and nature photographer, and is also an amateur naturalist at Roxborough State Park. His congenial leadership makes his trips increasingly popular.

**Meet:** at 9 a.m. at the intersection of Roxborough and Rampart Roads. Each car entering the park must purchase a daily user pass in addition to the field trip fee.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 20

## Bird Walk at Chatfield Arboretum

**Saturday, May 18**  
**7 to 10 a.m.**

This field trip was scheduled to coincide with the height of the annual spring migration period when many unusual birds can be seen. Expect to see great blue and black crowned night herons, migrating and nesting warblers, nesting woodpeckers, and hopefully, great horned owl chicks.

Please bring binoculars and a field guide (if you have them), sun block, and rain gear.

**Leader:** Tina Jones is a wildlife lecturer who teaches at the University of Colorado and Denver Museum of Natural History. She has many years of field experience.

**Meet:** promptly at 7 a.m. at Chatfield Arboretum which is located less than  $\frac{1}{2}$  mile to the left on Deer Creek Road just off Highway 75 (County Line Road).

**Fee:** \$4.50 members/\$5 non-members

**Limit:** 15

## Gardening for Results

**Saturdays from 10 a.m. to noon**  
**DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue. Please indicate your program titles if you are not attending the entire series.**

Professional horticulturists will present the background and techniques needed to achieve beautiful and bountiful gardens in this series of five two-hour programs. Attend them all or choose those that suit your specific needs.

### Saturday, April 6 The Small-Space Vegetable Garden

Techniques such as wide row spacing, successive planting, and intercropping will help you grow more produce in your city garden than you ever thought was possible. Learn sources of appropriate varieties.

### Saturday, April 20 Botany for Gardeners

Knowing basic floral structure and plant parts will help you understand proper horticultural practices. Take the mystery out of wilting, bolting, sunscald, and deep watering.

### Saturday, April 27 Composting

Learn how to take leaves, grass clippings, small prunings, and other refuse and pile them in such a way that soil bacteria can thrive and break them down into a usable form to enrich your garden soils.

### Saturday, May 4 All About Tomatoes

Everything you need to grow our favorite garden vegetable will be presented. Topics include determinate and indeterminate varieties, planting, pruning, fertilizing, and problems such as aphids, whiteflies, sunscald, and blossom end rot.

### Saturday, May 18 The Culinary Herbs

This class is an introduction to the culture and uses of the cooking herbs. Plan an herb garden or use them to accent your annual beds or perennial borders.

**Instructors:** Jim Borland, Larry Latta, Pat Pachuta, Lynn Thompson, and Gayle Weinstein are all horticulturists on the staff of Denver Botanic Gardens and John Brett is the former coordinator of our community gardening program.

**Fee:** Each program is \$8 or choose three for \$20, or all five for \$36.

## Basketry Workshop: Picnic Basket

**Section I:** Saturday, April 27

**Section II:** Thursday, May 2

(one session)

9 a.m. to 5 p.m. Classroom B



*Picnic basket by Robin Taylor Daugherty.*

**Please indicate your section on the registration form.**

This workshop is for students who have previously made at least one basket. Participants will make a round-lidded basket about 12 inches in diameter that is copied from an antique. It is an elegant container for portable meals that also makes a lovely sewing basket.

Please bring pruning shears, sandpaper in fine and medium grades, a jackknife, eight pinch-type clothespins, and a sack lunch.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$34 members/\$38 non-members (includes a \$10 materials fee).

**Limit:** 10

## Miniature Baskets Workshop

**Section I:** Monday, May 20

**Section II:** Saturday, May 25

(one session)

9 a.m. to 4 p.m. Classroom B

**Please indicate your section on the registration form.**

The shapes of these baskets are traditional but their size makes them appropriate for a doll's house. They make wonderful gifts and are beautiful holiday ornaments. Participants will make two (or possibly three) baskets and sizes will range from 1½ to 3 inches in diameter.

Please bring scissors or shears, white glue, a towel, and a sack lunch to class.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$32 members/\$35 non-members (includes a \$4 materials fee).

**Limit:** 10

## Wicker Basketry Techniques

**Tuesdays, April 30, May 7, 14, 21, 28**

**Section I:** 12:30 to 4 p.m. except April 30 when the class meets until 4:30 p.m.

**Section II:** 6:30 to 10 p.m. except April 30 when the class will begin at 6 p.m.

(five sessions)

**DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue.**

**Please indicate your section on the registration form.**

Wicker basketry is a technique of weaving that usually employs reed, willow, or rattan. Students in this course will use reed to make a variety of baskets in oval and round shapes and can expect to complete one basket each class session.

No previous experience is necessary. Please bring pruning shears, needle-nosed pliers, an awl, a towel, and a sack lunch.

**Instructor:** Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

**Fee:** \$95 members/\$105 non-members (includes a \$35 materials fee for the construction of five baskets).

**Limit:** 10

## Watercolor and Mixed Media Painting

**Wednesdays, April 24, May 1, 8, 15, 22, 29**

(six sessions)

**9:30 to 11:30 a.m. Classroom B**

Translate your vision of nature into exciting color! Wet-in-wet technique as well as painting on dry paper will be demonstrated. From quick gestures to slow, contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

**Instructor:** Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience.

**Fee:** \$48 members/\$53 non-members

**Limit:** 20

## Japanese Tea Ceremony

**Section I:** Sunday, April 7

**Section II:** Sunday, April 21

**Section III:** Sunday, May 5

**Section IV:** Sunday, May 12

(one session) 2 to 3 p.m.

**Tea House in DBG's Japanese Garden**

**Please indicate your section on the registration form.**

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility, and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an



opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

**Instructor:** Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

**Fee:** \$4.50 members/\$5 non-members

**Limit:** 15

*Kathryn Kawakami*

## Classic Egg Feature

Saturday, April 6

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Join this egg-decorating party for kids. Create an egg with eyes that move or colors that glow and glitter. Use flowers, sequins, and beads to create a classic egg treasure. Hunt for an Easter prize in the Gardens. Please bring three hard-boiled eggs to class.

**Instructor:** Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12

## The Crocodile's Smile

Saturday, April 20

(one session) Classroom B

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Who do you see in the Gardens' jungle? Create the creatures that are floating, flying, and slithering through their jungle home. Visit the Conservatory and discover how to paint or draw lines that are straight for the lurking, smiling crocodile, curved for the long and swinging tail of the monkey, and smooth for the tiger's stripes.

Use glowing colors for jungle flowers and learn new ways to use pastels and watercolors. Listen to jungle sounds and stories. Join our first "Create a Creature Exhibit."

**Instructor:** Jo Duranceau Cannon

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12

## The Sultan's Treasure

Saturday, May 4

(one session) Classroom C

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Listen to the story of the tulip and discover how this flower became the sultan's treasure. Learn how tulips began their journey to your garden on a camel's caravan. Tour the Gardens to see the fluffy parrot tulip and the black tulip.

Find out how their blossoms can follow the sun's path. Learn why the bulb is a winter storehouse and see the miniature flower and leaves of its hidden chamber.

Create your own Tulipmania Pop-Up Garden with its bees and butterflies from paper.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12

## Wonderful Wildflowers

Saturday, May 25

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

On your next hike through the mountains, be the first to know about the wonderful world of wild-

flowers. Visit the Rock Alpine Garden and see our wildflowers in bloom. Find out how they can grow in the crevices of rocks and learn why they need our protection. Meet the wild orchid, the starflower, and the jack-in-the-pulpit.

Find out how the Indians and pioneers used wildflowers and other plants. Listen to the legend of the blue bonnet and take home blue bonnet (wild lupine) seeds to start your own wildflower garden. Create a painting using a brush made from a native plant.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12

## Sweet Peas

Tuesdays, May 21, 28, June 4, 11

(four sessions)

10 a.m. to noon Classroom B

For pre-school children of ages 3-5 and a parent.

Parents and pre-school children, ages 3-5, can join us in a sunlit exploration of the wonderful world of seeds. See how seeds travel on the wind, float on oceans, and even hitch a ride. See the shapes of seeds from jungles to deserts, including the bird of paradise seed with its bright orange tuft.

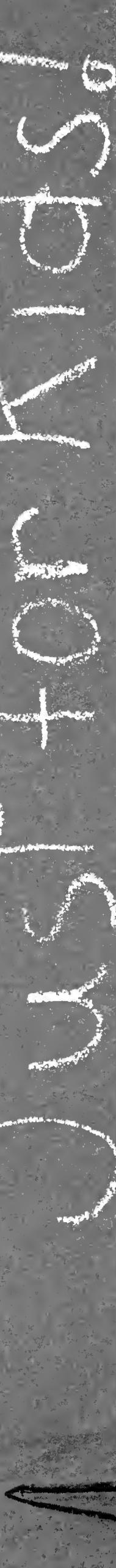
Listen to the fairy story of *The Princess and the Pea*. Create a sweet pea sunbonnet, seed jewels to adorn and sparkle, and make seed clay prints.

**Instructor:** Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

**Fee:** \$25 members/\$27.50 non-members (class fee covers a child and one parent)

**Limit:** 12

©1985  
JoDuranceau Cannon



## Orientation Scheduled for Outside Gardens Volunteers

Young and old from all walks of life are invited to join the 1985 Outside Gardens Volunteer Corps at Denver Botanic Gardens. Volunteers work with staff members in a variety of gardens to include the Aquatic Plant Display, Peony Garden, Cutting Garden, Demonstration Areas for Annuals, Turf, and Vegetables, and the Wildflower Test Garden.

Increased gardening knowledge, improved health and fitness, companionship, and relaxation are just a few of the positive aspects of the outside gardens volunteer program.

Perhaps the greatest incentive for becoming a volunteer is the pride that comes from providing a valuable service for a world-class botanic garden.

An orientation meeting for volunteers will be held from 1 to 4 p.m., Wednesday, April 17, in the Denver Botanic Gardens' House at 909 York Street. If you are interested in volunteering and able to donate some time throughout the growing season, call 575-3751 by April 15 to register for this program.

## April 11 meeting of Denver Rose Society

The monthly meeting of the Denver Rose Society (DRS) will be held April 11 at 7:30 p.m. in the Denver Botanic Gardens' House. Guests are cordially invited to join DRS members in learning about "Royal Franklin's Way of Gardening."

## Gardening Tips for April

Changing a residence can be a difficult and very traumatic situation. It requires a period of adjustment and a reestablishment of "new roots." There is a drain on energy and a period of depression. The young readjust more quickly than the old. Their ties are less deep, ways less rigid, and renewed energy more vigorous.

Plants and people have much in common. When plants are transplanted from one location to another, their roots are severed and ties are broken. The physiological processes are interrupted and the plants are set back or actually put into a state of decline. The environments to which they are moved offer new exposures, soil types, and changes in competition. The younger plants have more vigor and establish more quickly.

When is the best time to relocate? People find it easiest when something has been completed or prior to the start of something new.

Plants also adjust best under these same conditions. Relocating is less stressful in the late summer or early fall after completion of the season's growth or several weeks prior to the onset of new growth in the spring. Other development is not occurring at these times and energies can be channeled more directly into the reestablishment of new roots.

When people relocate, they usually do so to better or equal their previous living conditions. The elementary physiological needs—air, food, and water—all must be met for survival. When plants are relocated, these same simple needs must be met for their survival. Without an environment conducive to renewed growth and development, plants rely on what was stored. If this savings is not replenished and is eventually depleted, the plant will die. A

loosened soil with adequate drainage and room to grow allows the plant to develop.

In order to understand where the best places for relocation are we can continue to use the analogy of plants, people, and transplanting. When people relocate, a great deal of thought and maybe some investigation occurs before a move is made so that the new area of residence will, hopefully, provide the best opportunity for full development. A new residence for plants should accomplish the same goal. Unfortunately, we do not give them the same considerations. We plant Colorado spruce by the doorway of a house and Pfitzer junipers in front of the window. We forget that plants also go through stages of development and that while they may start out small, they will mature into larger specimens and rapidly outgrow their residence.

Plants, for some reason, are a mystery. Although they are recognized as living entities, they are too often not treated as such.

When we compare human needs for optimum survival and extract some of those basic requirements for plants, then the mystery is solved and the caring becomes easy.

Gayle Weinstein  
Botanist Horticulturist at Denver Botanic Gardens

Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

## Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

# C A R A

## Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

A  
S  
  
7 Japanese Tea Ceremony  
  
14  
  
21 Japanese Tea Ceremony

A detailed botanical line drawing of a Pasqueflower plant. The illustration includes a central stem with a cluster of flowers at the top and several leaves at the base. Labels are placed around the plant: 'L' and 'M' are at the top left; 'T' and 'E' are at the top right; '1' is on the left side; '2' is on the right side; '8' is on the left side; '9' is on the right side; '15' is on the left side; '16' is on the right side; '22' is at the bottom left; and '23' is at the bottom right. A small label at the bottom right reads "Pasqueflowers, Pulsatilla patens by Emma A. Ervin."

**N**  
**W**  
**3**  
**10**  
**17**  
Plant Life F  
Trip: Red  
Rocks Park  
**24**

A detailed botanical illustration of a flowering plant. The drawing shows a central flower with five petals and a cluster of stamens. Two stamens are clearly visible, each with a long filament and a two-lobed anther. The flower is surrounded by several leaves and a few smaller, unopened flower buds.

The illustration is labeled with letters and numbers:

- D**: Located at the top left above the number 4.
- T**: Located below the number 4.
- 4**: A large number positioned to the left of the main flower.
- 11**: A number positioned to the left of the flower.
- 18**: A number positioned to the left of the flower.
- 25**: A number positioned to the left of the flower.
- A**: Located at the top right above the number 5.
- F**: Located below the number 5.
- 5**: A large number positioned to the right of the main flower.
- 12**: A number positioned to the right of the main flower.
- 19**: A number positioned to the right of the main flower.
- 26**: A number positioned to the right of the main flower.

**R**

**S**

**6**

Classic Egg  
Feature, The  
Small-Space  
Vegetable  
Garden

**13**

**20**

Botany for  
Gardeners, The  
Crocodile's  
Smile

**27**

Aquatic Plants  
for Your Gar-  
den, Basketry  
Workshop,  
Composting

## Coming Next Month

- |  |   |                                     |
|--|---|-------------------------------------|
| May 2<br>Basketry<br>Workshop: Pic-<br>nic Basket                      | May 4<br>All About To-<br>matoes, The<br>Sultan's<br>Treasure, Wild-<br>flower Field Trip | May 5<br>Japanese Tea<br>Ceremony   |
| May 25<br>Miniature Bas-<br>kets Workshop,<br>Wonderful<br>Wildflowers |   | May 8<br>Mushroom<br>Identification |

Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

**Denver Botanic Gardens, Inc.**  
909 York Street  
Denver, Colorado 80206  
303-575-3751

April 1985

## TIME VALUE

Address correction requested



# Green

# Thumb

# N E

# W S

Denver Botanic Gardens

May 1985

Number 85-5



## Annual Plant and Used Book Sale, May 10 and 11

Preparations are well under way for Colorado's largest and, in fact, the grandest plant sale of any botanic gardens in the country. Denver Botanic Gardens Annual Plant and Used Book Sale will be held on Friday and Saturday, May 10 and 11. Come either day from 9:30 a.m. to 5:30 p.m. and select from the largest and most diversified selection of sale plants offered in Colorado at any one time. No gate admission fee will be charged.

Among this year's highlights:

### Perennials Booth

Some new species offered this year include the blackberry lily (*Belamcanda chinensis*), leopards-bane (*Doronicum caucasicum*), and the grape-leaved anemone (*Anemone vitifolia 'Robustissima'*).

Also available will be native and dryland plants including cone-flowers, penstemons, and evening primroses. A greater variety of ornamental grasses will be found this year, and, as always, plenty of favorites including clematis, lupines, daisies, day lilies, and ferns.

### Herb Booth

Among the oldest plants cultivated by man, herbs have long been used for culinary purposes. Their attractive forms and colors make them ideal garden subjects and discerning cooks are discovering that nothing can compare with their freshly harvested flavors. What pleasant surprises await those accustomed only to the taste of dried herbs!

A wide selection including annuals like basil and dill and perennials like sage and thyme will be on hand for the cooks who also garden.



### Rock Garden Booth

The Rock Garden and Ground Cover Booth has always offered a variety of rare and beautiful dwarf plants otherwise unobtainable in cultivation. This year, both the quality and the quantity of these plants are better than ever. The theme of this year's selections is "wildflowers for small city spaces."

Two special booths will highlight this theme. One will feature "troughs," lightweight, naturalistic planters for growing alpine plants on patios and even on apartment terraces.

You can watch as these troughs are planted, or even pick plants for your own trough and have a knowledgeable rock gardener plant one for you. These are built in imitation of ancient stone troughs used for feeding and watering animals but are considerably lighter.

Some of the best news this year, however, is that a second special booth will feature a selection of more than 150 choice alpines chosen from the collection in the Rock Alpine Garden at Denver Botanic Gardens and grown in our greenhouses.

These are all plants unavailable from any local nursery source, some never offered for sale anywhere. Most are native Western wildflowers that are especially suited to our unique growing conditions.

Some of the choicest include the waxy-leaved, shrubby penstemon (*Penstemon fruticosus 'Holly'*) which resembles a tiny evergreen holly. It is from the Wallowa Mountains of northeastern Oregon. There are also plants of the stemless evening prim-

*continued on page 5*

### Inside:

*Alpines Around the World 1985*  
page 2

*1985*  
*Garden Concerts*  
page 2

*Classes for Adults*  
pages 8-9

*Classes for Kids*  
pages 10-12

## 2 1985 Garden Concert Series

Music lovers of almost every ilk, from classical purist to down-home bluegrasser, will find something to enjoy this summer when Denver Botanic Gardens, KCFR Radio, United Bank of Cherry Creek, and United Bank of Denver present the 1985 Garden Concert Series. An expanded series of eight outdoor programs, including for the first time, a dance performance, is scheduled in Denver Botanic Gardens' amphitheater. Please note that the Cleo Parker Robinson Dance Troupe, the Colorado Philharmonic, and Hot Rize will each



perform on two consecutive evenings. This summer's program is as follows:

Thursday, June 27 (rain date—

Sunday, June 30 at 10 a.m.) The American Brass Quintet: Music from the Aspen Music Festival

Thursday, July 11 or Friday,

July 12 (rain date—for both on Sunday, July 14 at 10 a.m.) Cleo Parker Robinson Dance Troupe

Thursday, July 25 or Friday,

July 26 (rain date—Sunday, July 28 at 10 a.m.) The Colorado Philharmonic

Thursday, August 8 (rain date—

Sunday, August 11 at 10 a.m.) The Boulder Bassoon Band

Thursday, August 22 or Friday,

August 23 (rain date—Sunday, August 25 at 10 a.m.) Hot Rize

Thursday, September 5

Details to be announced.

All concerts will begin at dusk.

Non-refundable tickets for each performance are \$3 each for members of Denver Botanic Gardens or KCFR (proof of membership will be required at time of

purchase) and non-member tickets are \$5 each. All will be sold on a first come, first served basis with a limit of four tickets per person.

Although babes in arms will be admitted free, all others will require a ticket. Children are welcome to attend the concerts and are encouraged to sit quietly with their parents so that all can enjoy the music. Denver Botanic Gardens is unable to hold tickets for late arrivals or keep lists of names at our gate.

Information pertaining to the dates and locations of ticket sales as well as concert starting times will be provided in the June *Green Thumb News*. Our concerts are very popular and tickets are generally sold by noon. Make plans early because the lack of season tickets encourages a different audience for each concert.

The gate on York Street opens at 6 p.m., so bring a picnic supper and a blanket and savor a delightful evening of music in our colorful summer surroundings. All programs (except Cleo Parker Robinson) will be broadcast live by KCFR at 90.1 FM. If a concert is threatened by bad weather, listen to KCFR (beginning at 4 p.m.) for an announcement of the status of the Thursday evening concerts.

### Tributes

**In Memory of L. Richard Girouard**  
Mr. & Mrs. William B. Collister

**In Memory of Elaine Jacob**  
DeDe Gorin

**In Memory of Jayme McLean**  
Mr. & Mrs. Ronald Ament

Clayton & Anne Decker

Paul & June Evans

The Dreckman Family

Dorothy Keeper

Lucille Jordan

Walter Jordan

Donald & Maxine Lear

Lucy Scholl

Verne & Betty Skaggs

Lois E. Thompson & Family

Frances & Don Thurston

**In Memory of Aksel Nielsen**

Mrs. Brown W. Cannon

**In Memory of Amy Stearns**

Mrs. Brown W. Cannon

**In Memory of Donald J. Walden**

Dr. & Mrs. Jack Stoffel

**In Memory of Jack Wallace**

Mr. & Mrs. William B. Collister

Orrin Cowles

Mr. & Mrs. John F. Falkenberg

Syd Glick

Deatt Hudson

Mr. & Mrs. Ross Lahr

Beverly Nilsen

Fran Regner

Lou & Charlotte von Gunten

Marilyn Weir

**In Memory of Mrs. Patrick M. Westfeldt**

Mr. & Mrs. David A. Pfaelzer

**In Memory of Adolph Zang**

Mrs. Brown W. Cannon

## Third Annual Rock Gardening Symposium: Bring the Rockies Into Your Garden

Denver Botanic Gardens and the Rocky Mountain Chapter of the American Rock Garden Society proudly announce their third annual symposium, "Alpines Around the World: Bring the Rockies Into Your Garden," which will be held on Friday and Saturday, June 14 and 15, in John C. Mitchell II Hall.

Coloradoans are tremendously proud of the floral wealth of the Rockies and hike and climb all summer long in pursuit of gorgeous and profuse wildflower displays. Ambitious gardeners are discovering that it's possible to recreate some of the subtle beauty of the mountains in their backyards. A simple stone wall can be filled with stonecrops, or a steep bank can be covered with ground covers. These are some of the ways that rock gardening can help bring nature into the home landscape and actually solve landscaping problems.

Rocky Mountain horticulture may be different, but it need not be difficult or unimaginative. Not only can we grow a variety of moisture-loving plants in cool microclimates around our gardens, but there are also many beautiful dryland plants available that are virtually unknown to horticulture.

So little has been done to experiment with our native plants that each participating gardener is actually a pioneer. This symposium will explore the many ways a home-

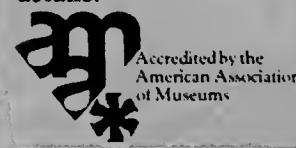
### Green Thumb News Number 85-5 May 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp.

Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than April 19 for June, May 20 for July, and June 20 for August.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



## PROGRAM: Alpines Around the World

### Friday, June 14, 1985

owner can experiment with wild plants in the home landscape.

Participants will learn the basics of rock garden design including rock selection and placement as well as the wealth of available plant material that features such diverse groups as hardy cacti and succulents and miniature iris. Programs will be presented by distinguished horticulturists from the United States and England and will feature noted expert Michael Upward, Secretary of the Alpine Garden Society of Britain, well-known author and garden designer Pamela Harper, and nurserymen such as Steve Doonan and Phil Pearson of Grand Ridge Nursery, Washington, and Betty Ann Mech, proprietor of the highly regarded Rice Creek Gardens.

Demonstrations and a variety of workshops from which to select will be available on both days. Small group workshops will encourage the opportunity to meet speakers on a one-to-one basis. Rock gardening exhibits and a plant show and sale will be open to the public.

How can I place a rock garden or wildflower bed into my home garden? How will it fit aesthetically? What are the details I must know to make these plants flourish without undue effort? How can I bring them in from the wild without breaking the law, or causing environmental damage? These are some of the questions we will seek to answer in this third annual symposium on rock gardening.

### Members on the Move

Especially in the spring and summer a surprising number of our members seem to change their residences! If you know the address to which you will be moving before you leave your old address, we would greatly appreciate your telling our membership office.

Call or write us by the 15th of the month and your next newsletter should greet you at your new home—with no interruption of service. The post office does not forward 3rd class mail, and they charge 22 cents for each newsletter address-correction they return to us. Both you and the Gardens will benefit from your timely thoughtfulness.

- 8:30 a.m.—Registration  
 9:00—Opening remarks  
 Merle M. Moore, Executive Director of Denver Botanic Gardens  
 9:15—"Cultural Basics: What a Plant Wants" Steve Doonan and Phil Pearson, proprietors of Grand Ridge Nursery, high in the Cascade Mountains of Washington, are renowned for their skill in growing and propagating rare plants. Here they will examine the basic elements

Allan Taylor and Rod Haenni are knowledgeable horticulturists who have the practical experience necessary to guide us through this spiny subject.

- 2:00—"The Legacy of Claude Barr" Claude Barr devoted sixty years of his life to the selection, culture, and dissemination of Great Plains wild-flowers which culminated in his *Jewels of the Plains*. His friend and associate, Betty Ann Mech, will



of the art of gardening: air, soil, roots, and water.

10:00—"Design in the Natural Garden" Pamela Harper is the author of the forthcoming HP Perennial book and an authority on garden design and rock gardening. In this program she will examine the pitfalls that discourage the home gardener. Just how can you use these plants effectively in your own garden?

10:45—Coffee Break

11:00—Demonstrations and Workshops: Session I. Choose from one of the following: (1) Native Plants You Should Know and Grow (2) What Your Neighbors Grow (3) Nurserymen's Choice (4) Culture and Handling of Cacti (5) The Confounding Composites (6) Tour of the Rock Alpine Garden

12:00 p.m.—Lunch Break: An optional lunch will be provided in John C. Mitchell II Hall.

1:00—"The Dryland Garden: Cacti and Succulents in the Rocky Mountain Garden" There has been much talk lately of "xeriscape."

introduce us to the life of this great man and his plants.

3:00—Demonstrations and Workshops: Session II Choose another of the subjects from Session I.

4:00—Plant Sale and Exhibits close for the day

### Saturday, June 15, 1985

8:30 a.m.—Second day registration

9:00—Opening remarks  
 Stan Metsker, President Rocky Mountain Chapter, American Rock Garden Society

9:10—"From the Ground Up: The How-To of Rock Gardens" In addition to operating Rice Creek Gardens, a highly regarded mail-order nursery, Betty Ann Mech designs and builds rock gardens not only for private homeowners, but for the city of Minneapolis as well. She will illustrate the do's and don't's of rock garden construction.

10:00—"Plants and Rocks—the Next Step" Michael Upward, Secretary of the Alpine Garden Society of Britain for twenty years, has just published the newest handbook on rock gardening. He will give a state-

## 4 PROGRAM:

of-the-art review of how to create an exciting, contemporary rock garden.

### 10:45—Coffee Break

**11:00—Demonstrations and Workshops: Session III.** Choose from one of the following: (1) Native Plants You Should Know and Grow (2) What Your Neighbors Grow (3) Nurseriesmen's Choice (4) Culture and Handling of Cacti (5) Dwarf Bearded Iris for the Rock Garden (6) Tour of the Rock Alpine Garden

**12:00 p.m.—Lunch Break:** An optional lunch will be provided in John C. Mitchell II Hall.

**1:00—"From the Wild Into Your Garden"** Phil Pearson and Steve Doonan are regarded as two of the finest rare plant nurserymen on this continent. In this presentation they will describe how they select (sometimes at great peril!) wild plants for propagation, without ever collecting a single plant.

**2:00—"Glories of the Garden"** Panayoti Kelaidis, Curator of our Rock Alpine Garden, will introduce the wealth of bulbous plants that can enrich our gardens. Cultural information and sources will be provided.

**3:00—Demonstrations and Workshops: Session IV.** Choose another of the subjects from Session III.

### 4:00—Symposium adjourned

### 4:30—Plant Sale and Exhibits close

In addition, the Rocky Mountain Chapter of the American Rock Garden Society invites you and guests to an illustrated lecture by Michael Upward, Secretary of the Alpine Garden Society of Britain. Please note that there is no additional charge for this program.

### 7:30—"Plant Hunting in the Sikkim Himalayas"

We invite you to attend this symposium where you can hear leading experts in the field of rock gardening and learn how to successfully grow many of the alpine plants our mountains are so famous for. A plant show, exhibits, and plant sale are open to the public at no additional charge other than non-member gate admission fee. Lectures and demonstrations require registration, which includes entry fee and coffee. Optional box lunches are available each day and must be paid for in advance. Please return a completed pre-registration form by

June 5, 1985 to:

Alpines Around the World  
Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

## Adding Machines Needed for Plant Sale

Denver Botanic Gardens is in need of used adding machines for the 1985 Plant Sale. If you have one you are willing to donate, please bring it to the DBG House at 909 York Street between 8 a.m. and 5 p.m. on weekdays or call the Development Office at 355-3456.

## "Hot Jazz into the Cool Night"

Mark your calendars and plan to attend The Garden Party, an annual benefit for Denver Botanic Gardens. This year's festivities will feature a delicious dinner and jazz on Friday evening, July 19, in the delightful summer splendor of our outdoor gardens.

## Alpines Around the World Registration Form

Please send registration form to Denver Botanic Gardens.

Name \_\_\_\_\_ Print name as you want it to appear on badge

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime phone \_\_\_\_\_ DBG Member: Yes  No

Additional registrants:

1) \_\_\_\_\_

2) \_\_\_\_\_

I have enclosed \$ \_\_\_\_\_ for \_\_\_\_\_ people on the following days:

Both Days \$26.00 per person \_\_\_\_\_, lunch: \$12.00 \_\_\_\_\_,

Friday, June 14 \$14.00 per person \_\_\_\_\_, lunch: \$ 6.00 \_\_\_\_\_,

Saturday, June 15 \$14.00 per person \_\_\_\_\_, lunch: \$ 6.00 \_\_\_\_\_,

Send to: Alpines Around the World; Denver Botanic Gardens;  
909 York Street; Denver, Colorado 80206.

**Friday, June 14: Workshops and Demonstrations** (Please mark two choices [X] and an alternative [A] for each day).

- Native Plants You Should Know and Grow (Jim Borland)
- What Your Neighbors Grow (Anthology of local gardens by members of the Rocky Mountain Chapter)

### Optional Total

- Nurseriesmen's Choice: Pat Thorn of Little Valley Wholesale Nursery
- Culture and Handling of Cacti (Allan Taylor, Rod Haenni)
- The Confounding Composites (Sandra Snyder)
- Tour of the Rock Alpine Garden

**Saturday, June 15: Workshops and Demonstrations** (Please mark two choices [X] and an alternative [A] for each day.)

- Native Plants You Should Know and Grow (Jim Borland)
- What Your Neighbors Grow (Anthology of local gardens by members of the Rocky Mountain Chapter)
- Nurseriesmen's Choice—Dermod Downs of Country Lane Nursery
- Culture and Handling of Cacti (Allan Taylor, Rod Haenni)
- Dwarf Bearded Iris for the Rock Garden (Harry Kuesel)
- Tour of the Rock Alpine Garden

Make checks payable to Denver Botanic Gardens. Registrations will not be acknowledged; your cancelled check serves as your receipt. Pre-registration is advised, however, and if space is available, participants are welcome to register at the door.

Please note that space in the workshops and demonstrations is limited and late registrants may not be accommodated in their first choices.

## Plant and Used Book Sale, (cont.)

rose (*Oenothera caespitosa*) which can have flowers up to six inches across.

A few special exotics include the New Zealand vegetable sheep (*Raoulia australis*) that has proven very hardy in gritty soils in partial shade here. Another exotic is the pink-flowered curry plant (*Helichrysum virginium*) with soft wooly rosettes. Its bright pink flowers can be cut and dried and make delightful everlasting arrangements.

In the main section of the Rock Garden and Ground Cover Booth, you can be sure to find a good assortment of vigorous ground covers and choice wildflowers. There are always plants of the diminutive Colorado alpine columbine



(*Aquilegia saximontana*) which is a hallmark of this booth. Three years ago this booth introduced the hardy ice plant to local gardeners. There will be lots of this on hand this year as well to satisfy the tremendous interest in this wonderful plant.

### Miniature Rose Booth

These tiny beauties have been in increasing demand since the dedication of the May Bonfils Stanton Rose Garden in August, 1982. Ranging in size from less than 10 inches to 2 feet tall, they are easy to grow and are especially nice for fanciers living in condominiums or apartments.

With the onset of winter, miniature roses can be brought inside, given a sunny location, and they will continue to bloom all winter. New varieties will also be available this year. Some can be grown as climbers, some as upright bushes, and the most exciting of all make excellent hanging baskets.

### Plant Donations Booth

For new treasures every year, check the selection of hardy perennials particularly suited to the Rocky Mountain climate that have been donated by generous members.

### Additional Plant Booths

There will be well-stocked booths specializing in annuals, bonsai, cacti, waterlilies, gladioli, house plants, trees, shrubs, and vegetables. Look for the Berry Basket Booth, Children's Booth, and the Patio Booth.

### Used Book Sale

According to Librarian Solange Gignac, this year's book sale will have a little of everything including a fine selection of gardening books.

## Mile High & Dry Xeriscape Symposium

The Mile High & Dry Xeriscape Symposium on Low Water Demand Plant Materials and Methods will be held on Friday, June 7. Morning presentations will be devoted to Front Range ecology, landscaping economics, and xeriscape principles. The afternoon will cover design, installation, and maintenance of appropriate dryland plant materials.

This symposium, designed for the home owner and the professional, will be held in John C. Mitchell II Hall from 8:30 a.m. to 4:15 p.m. For additional information and registration materials, please contact the Denver Audubon Society at 1720 Race Street, Denver, 80206, or call 399-3219.



5

1985 Plant Sale poster by Gayle Crites.

## Denver Rose Society May Meeting

Pat Gallavan, Parks and Recreation Director, will deliver a program titled, "Denver Parks and their Gardens," at the Denver Rose Society May meeting. Guests are encouraged to attend this presentation on Denver parks scheduled for May 9 at 7:30 p.m. in the Denver Botanic Gardens' House at 909 York Street.

For the convenience of browsers, the books will be carefully separated into categories. There will be a section for science fiction and one for novels. There will be a table for classics and separate shelves for psychology, sociology, history, political science, religion, anthropology, health, natural history, occult subjects, general reference, murder mysteries, humor, sports and hobbies, literary reference, collected stories and essays, poetry, drama and films, and children's books.

There will be tables with cookbooks, biographies, Americana, women's liberation, horticulture, languages, travel, art, and music.

Knowledgeable volunteers and staff will be available to answer your questions. The Gift Shop Annex will be open and full of special springtime bargains for the avid gardener.



"Striving for Balance: the Horticulturist/the Therapist" is the title of the 13th annual conference of the National Council for Therapy and Rehabilitation through Horticulture (NCTRH) which will be held at DBG on July 21-25, 1985. Co-sponsored by Denver Botanic Gardens and the Central Rocky Mountain Chapter of the NCTRH, the conference sessions will be relevant to horticulturists, adjunctive therapists, and other personnel working in the human services.

Horticultural therapists, horticulturists, and representatives of other therapeutic media will present topics and issues with emphasis on hands-on learning and demonstration. Participants will learn how to establish a horticultural therapy program and apply counseling techniques in non-traditional settings and will become acquainted with methods of research and program documentation.

The pre-registration fee for the entire program is \$120 and registrants will be charged \$130 after July 1, 1985. The student fee is \$90 and a daily fee of \$50 has also been set. For an additional small charge Colorado State University is offering one college credit hour and continuing education credit to conference participants.

For further information, please contact Judy Carrier, DBG horticultural therapist, at 575-3751, extension 42.

## Flower Design Symposium May 29

The Colorado Federation of Garden Clubs will sponsor a rare opportunity to learn techniques of floral design from nationally known designer Bob Thomas. On May 29 a one-day symposium will be offered in DBG's John C. Mitchell II Hall from 8:30 a.m. to 3:30 p.m.

Bob Thomas has designed for 35 years and has demonstrated his techniques in major design schools across the country. He recently returned from South America where he collected some of the exotic materials used in his unique arrangements.

The program will be divided into two sessions. The morning will deal with the mechanics of creative design. Following a break for lunch, he will return to provide a two-hour arrangement demonstration. The last hour will deal with point-scoring for flower arranging judges.

Registration information for this symposium can be obtained by calling Mary Jo Kniseley, 756-6311. Students can register for a full-day session at \$12 or a half-day session (12:30 to 3:30 p.m.) at \$6. A lunch is available for an additional \$5. Bob Thomas has been to Denver only once prior to this visit, so plan to take advantage of this opportunity to learn from this world-renowned designer.

Students interested in this symposium are reminded that registration must be made through the Colorado Federation of Garden Clubs.

## Great Getaways

A marvelous tour of gardens, estates, mansions, and museums of the Great Lakes region has been planned by Denver Botanic Gardens. Departing from Denver on September 7, the group will spend two weeks in the Cleveland, Detroit, and Chicago areas exploring some superb sites.

Pleasant fall days will be spent visiting the following: Gardens of Kingwood Center, Cranbrook House and Garden, Mitchell Park Conservatory, and Chicago Botanic Gardens; Houses of Stan Hywet Hall, Cantigny, Cranbrook, and Kingwood Center; and Museums including Cleveland Art Museum, Detroit Institute of Art, Henry Ford Museum, and Chicago Museum of Science and Industry. These and others will highlight this trip to the Great Lakes region this fall. Call Travel Associates, 759-8666, or contact Andrew Pierce, Assistant Director of Denver Botanic Gardens, 575-3751 for additional details.

## Remember *Peter and the Wolf*?

For many of us, it was our first introduction to music and the sounds of an orchestra. Different instruments representing different characters in Peter's story tooted, boomed, or sweetly sang to us as we listened in rapt fascination. After "Peter" music was never the same for many of us. We had interacted with it and had been caught up with its vitality, life, and character.

This summer Denver Botanic Gardens, Young Audiences, Inc., and the Coors Foundation will combine efforts to try to recreate a little of that magic in a series of "Young Audiences Garden Family Concerts."

On three Tuesday evenings, June 18, July 16, and August 20, Young

Audiences will present live, informal, interactive concerts designed to involve children and their parents, in the life and soul of performed music.

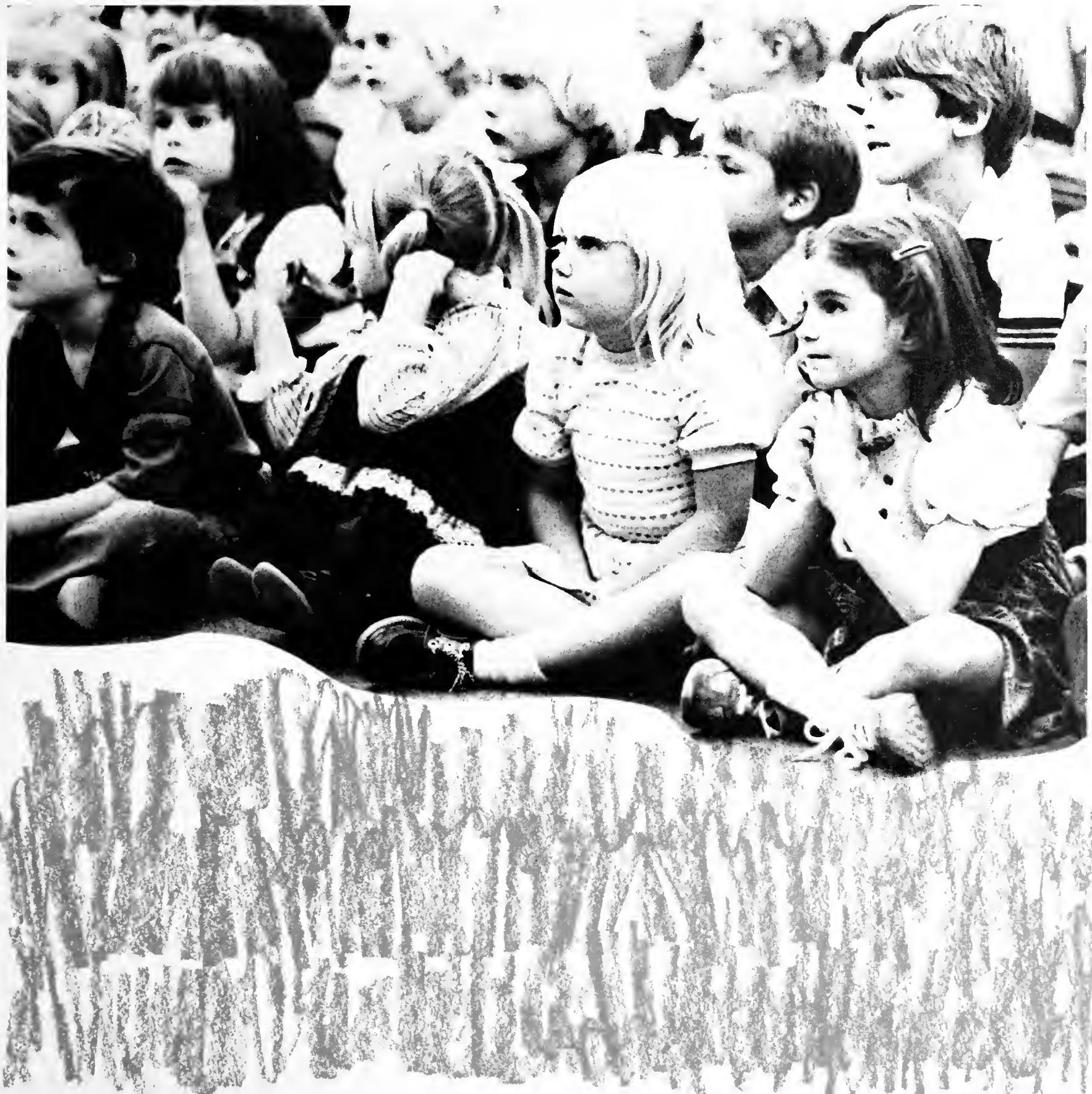
Young Audiences, Inc., is a 32 year-old national non-profit organization composed of small groups of professional performing artists, which provides live experiences in music, dance, and drama for children. There are 38 chapters throughout the United States and Canada.

Professional support for Young Audiences comes from some of America's best known musicians, including Leonard Bernstein, Claude Frank, Zubin Mehta, Yehudi Menuhin, Itzhak Perlman, Isaac Stern, Pinchas Zukerman, and others.

Organized in 1961, the Denver Chapter of Young Audiences, Inc., has a varied number of ensembles and artists who perform each year. Performers are chosen for professional skill and for their ability to relate to children.

Tickets for these evening concerts will be \$2, and children under two will be admitted free. In the event the concerts are cancelled due to rain, the rain date will be the following Tuesday evening.

Look for more information on the "Young Audiences Family Concerts" in the June issue of the *Green Thumb News*. Plan now to spend these evenings in the Gardens' amphitheater with your children.



Spring  
1985

## Denver Botanic Gardens



### More Gardening for Results

Saturdays from 10 a.m. to noon at DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue. Please indicate your program titles if you are not attending the entire series.

Professional horticulturists will present the background and techniques needed to achieve beautiful and bountiful gardens in this series of two-hour programs. Attend them all or choose those that suit your specific needs.

#### Saturday, June 1 Container Gardening

Expand your gardening space by learning how to grow flowers and vegetables in containers. Types of containers, appropriate soil mixes, and plant varieties along with good cultural techniques will be covered.

#### Saturday, June 15 Biological Control in the Home Garden

Biological control is the use of natural enemies to reduce pest insect populations. This is an opportunity to learn some insect life cycles and their natural predators. Learn what to purchase and how to apply it for maximum results.

#### Saturday, June 29 Pesticides in the Home Garden

In this introduction to proper pesticide use, students will learn the difference between organic and botanical pesticides, safe application and timing techniques, and how to mix and dispose the commonly used home pesticides.

**Instructors:** Jim Borland, Larry Latta, Pat Pachuta, Lynn Thompson, and Gayle Weinstein are all horticulturists on the staff of Denver Botanic Gardens and John Brett is the former coordinator of our community gardening program.

**Fee:** Each program is \$8 or choose three for \$20, or all five for \$36.

### Mushroom Identification

Wednesdays, May 8, 15, 22  
(three sessions)

7:30 to 9:30 p.m. Classroom C

This course will present a new and simplified approach to mushroom identification for beginners, while providing a firm base for those who may wish to pursue the subject in more depth in the future.

Three slide lecture sessions will cover structure, growth, habitat, and seasonality of mushrooms as well as information on toxicity and edibility. The use of field guides and keys will be demonstrated and rec-



*Instructor Moras Shubert*

ommendations will be given on those most useful in our area.

The main emphasis will be spring-fruiting mushrooms of the city and lower elevations. Collecting, cleaning, preparation, and cooking hints will be provided.

Handouts will be given but students should be prepared to take additional notes. Participants will learn to positively identify more than 20 common edible, non-edible, and poisonous species. An optional field trip will be scheduled according to local mushroom fruiting times.

**Instructor:** Marilyn Shaw lectures and teaches extensively and has been active in the Colorado Mycological Society for 12 years. She has studied with Alexander Smith, Harry Thiers, and Orson Miller, Jr., as well as many other prominent mycologists. Marilyn is a consultant in mushroom identification for Denver Botanic Gardens and Rocky Mountain Poison Center.

**Fee:** \$24 members/\$26 non-members

### Botany for Beginners

Saturdays, June 8, 15, 22, 29  
(four sessions)

9:30 to 11:30 a.m. Classroom B

(This course is a repeat of the popular "Botany for Beginners" offered this past February.)

This is a course for those who have no background in botany but wish to know more about plant parts and what they do. This skill is fundamental if you wish to learn how to identify plants. It will also help you appreciate what plants require.

Some microscope work as well as greenhouse tours are included.

**Instructor:** Moras L. Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience.

**Fee:** \$32 members/\$35 non-members

**Limit:** 15

### Beginning Bonsai

Thursdays, May 16, 23, 30  
(three sessions)

7:30 to 10 p.m. Classroom B

This introductory course will cover the historical and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting, and general care of bonsai in Colorado will be included.

Each student will take a completed bonsai home. All materials including a text will be provided.

**Instructors:** Keith Jeppson, past president of Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 13 years. Harold Sasaki is a commercial bonsai grower, and an experienced bonsai hobbyist of 15 years.

**Fee:** \$47 members/\$52 non-members (includes a \$17 materials fee).

**Limit:** 20

### Perennial Pleasures

Tuesdays, May 28, June 4, 11, 18, 25  
(five sessions)

7 to 9 p.m. Classroom C

(This course is a repeat of the popular "Perennial Pleasures" offered this past February.)

With proper planning and planting, perennials can enhance any garden with long-term beauty and reduced maintenance. Discover the pleasures of perennial gardening in this five-week course that covers



garden design, soil preparation, and cultivation as well as a multitude of suggested plants.

Perennials for specialized situations, such as shady areas, will also be discussed. There will be ample opportunity for questions.

**Instructor:** Andrew Pierce is a horticulturist and is assistant director of DBG. He is an avid grower of perennials and alpine plants.

**Fee:** \$40 members/\$44 non-members  
**Limit:** 18

### Plant Life Field Trip: Plainview Area

**Wednesday, May 15**  
**9 a.m. to 4 p.m.**

Come and enjoy the spring flowers of the mesas on a visit to the Plainview area in the foothills between Golden and Boulder.

Flowers to expect include wild iris, arnica, chiming bells, sand lilies, and white violets as well as hawthorn and chokecherry trees. Bring a lunch.

**Leader:** Mary Edwards is an enthusiastic botanist who volunteers in the Kathryn Kalmbach Herbarium at DBG.

**Meet:** at 9 a.m. at Denver Botanic Gardens House to carpool and share gasoline expenses.

**Fee:** \$2 per person  
**Limit:** 20

### Field Trip to Bear Creek Nature Center, Colorado Springs

**Saturday, June 1**  
**1 to 3:30 p.m.**

Tucked against the mountains in the western end of Bear Creek Regional Park is Bear Creek Nature Center, 150 acres of such varied habitats as a stream area with a wooded glen and a short grass prairie. A wide diversity of species inhabits this lower foothills and upper plains area including impressive groves of native oaks.

Consider bringing lunch beforehand to enjoy at the picnic area.

**Leader:** Richard Schwendinger has been botanizing and leading field trips throughout North America and Alaska for over 25 years.

**Meet:** at 1 p.m. at the parking lot near the park entrance. Take I-25 south to the Colorado Springs area and exit onto Highway 24 west (toward Manitou Springs). In

approximately two miles, turn left on 26th Street. Travel for about 1.5 miles and you will find the Nature Center on the left.

**Fee:** \$2.50 members/\$3 non-members  
**Limit:** 20

### Field Trips to Roxborough State Park

**Section I:** Tuesday, June 4  
**Section II:** Sunday, June 9  
**9 a.m. to noon**

Please indicate your section on the registration form.

Learn spring wildflower identification at this spectacular park. An easy trail winds through striking geologic formations where a wide variety of habitats including sunny, open hillsides, hogback ridges, and a moist stream valley will be explored.

Please come prepared and bring drinking water, a snack, sensible, waterproof walking shoes, and a jacket.

**Leader:** Bob Heapes is an experienced field trip leader and nature photographer, and is also an amateur naturalist at Roxborough State Park. His congenial leadership makes his trips increasingly popular.

**Meet:** at 9 a.m. at the intersection of Roxborough and Rampart Roads. Each car entering the park must purchase a daily user pass in addition to the field trip fee.

**Fee:** \$2.50 members/\$3 non-members  
**Limit:** 20

### Japanese Tea Ceremony

**Section III:** Sunday, May 5  
**Section IV:** Sunday, May 12  
**Section V:** Sunday, June 9  
**Section VI:** Sunday, June 23  
**(one session)** 2 to 3 p.m.  
**Tea House in DBG's Japanese Garden**

Please indicate your section on the registration form.

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility, and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

**Instructor:** Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

**Fee:** \$4.50 members/\$5 non-members  
**Limit:** 15

### Miniature Baskets Workshop

**Section I:** Monday, May 20  
**Section II:** Saturday, May 25  
**(one session)**  
**9 a.m. to 4 p.m.** Classroom B

Please indicate your section on the registration form.

The shapes of these baskets are traditional but their size makes them appropriate for a doll's house. They make wonderful gifts and are



beautiful holiday ornaments. Participants will make two (or possibly three) baskets and sizes will range from 1½ to 3 inches in diameter.

Please bring scissors or shears, white glue, a towel, and a sack lunch to class.

**Instructor:** Robin Taylor Daugherty  
**Fee:** \$32 members/\$35 non-members  
**(includes a \$4 materials fee).**

**Limit:** 10

Basketry student Grant Downer

## The Sultan's Treasure

Saturday, May 4

(one session) Classroom C

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Listen to the story of the tulip and discover how this flower became the sultan's treasure. Learn how tulips began their journey to your garden on a camel's caravan. Tour the Gardens to see the fluffy parrot tulip and the black tulip.

Find out how their blossoms can follow the sun's path. Learn why the bulb is a winter storehouse and see the miniature flower and leaves of its hidden chamber.

Create your own Tulipmania Pop-Up Garden with its bees and butterflies from paper.

Instructor: Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

Fee: \$6.50 members/\$7 non-members

Limit: 12

## Sweet Peas

Tuesdays, May 21, 28, June 4, 11  
(four sessions) Classroom B

Section I: 10 a.m. to noon (This section is filled.)

Section II: 1 to 3 p.m.

For pre-school children of ages 3-5 and a parent.

Parents and pre-school children, ages 3-5, can join us in a sunlit exploration of the wonderful world of seeds. See how seeds travel on the wind, float on oceans, and even hitch a ride. See the shapes of seeds from jungles to deserts, including the bird of paradise seed with its bright orange tuft.

Listen to the fairy story of *The Princess and the Pea*. Create a sweet pea sunbonnet, seed jewels to adorn and sparkle, and make seed clay prints.

Instructor: Jo Duranceau Cannon

Fee: \$25 members/\$27.50 non-members (Class fee covers a child and one parent.)

Limit: six children and six adults

## Wonderful Wildflowers

Saturday, May 25

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

On your next hike through the mountains, be the first to know about the wonderful world of wildflowers. Visit the Rock Alpine Garden and see our wildflowers in bloom. Find out how they can grow in the crevices of rocks and learn why they need our protection. Meet the wild orchid, the starflower, and the jack-in-the-pulpit.



Chatfield Arboretum schoolhouse

Find out how the Indians and pioneers used wildflowers and other plants. Listen to the legend of the blue bonnet and take home blue bonnet (wild lupine) seeds to start your own wildflower garden. Create a painting using a brush made from a native plant.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

## Cloud Invaders: Kites for Kids

Saturday, June 8

(one session) Classroom A

Section I: For children of ages 5-7  
11 a.m. to 1 p.m.

Section II: For children of ages 8-11  
2 to 4 p.m.

Please indicate your section on the registration form.

Be a sky explorer and create your own kite to fly in the gentlest of breezes. Create a rainbow, dragon, or butterfly to dance with the clouds and soar into the blue. Test flights will be held at the Gardens.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

## Spices and Sailing Ships

Saturday, June 22

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

What do mustard on a hot dog and a cinnamon bear have in common? They are both flavored from spices. Find out how sweet-smelling and spicy mixtures can be made from bark, seeds, flowers, buds, and roots. Learn which evergreen tree is the source of two spices.

Discover how men in the time of castles and kings set out in sailing ships to find a route to the Spice Islands and bumped into the New World instead. Bake a spicy surprise and sample the best in cinnamon bears. Build your own sailing ship and race it on the Gardens' ponds.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 15

## For Children of Ages 5 to 7 and a Parent

### Pioneers on the Plains

Monday, July 29, Tuesday, July 30,  
Thursday, August 2, Friday,  
August 3

(skip Wednesday, July 31)

(four sessions) 10 a.m. to noon

This class meets at the Chatfield Arboretum schoolhouse. The Arboretum is located less than  $\frac{1}{2}$  mile to the left on Deer Creek Road just off Highway 75 (County Line Road).

Visit the 1800's one-room schoolhouse at DBG's Chatfield Arboretum and return to a time when pioneers settled the Plains. Children with a parent can join nature hikes and listen to songbirds. Look for a resident family of owls. Walk near the stream's edge and learn to identify creature tracks.

Discover which flowers pioneers planted in their gardens and learn some of their crafts. Dye yarn using plant materials to recreate summer's spectrum. Make your own marble paper and wax candles. Enjoy old-fashioned games and have a peppermint orange treat.

Instructor: Jo Duranceau Cannon

Fee: \$25 members/\$27.50 non-members (Class fee covers a child and one parent.)

Limit: 8 children and 8 parents

## For Children of Ages 5 to 7

### Dinosaur Salads

**Monday through Thursday**  
**June 17-20 Classroom A**  
 (four sessions)  
**Section I: 10 a.m. to noon**

Please indicate your section on the registration form.

What did a dinosaur have for lunch? Learn about "dinosaur salads" as well as the living fossil plants such as ferns, horsetails, and cycads that grew in swamps and bogs. Create a clay dinosaur, make rubbings, and print living fossil plant leaves with sunlight.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$20 members/\$22 non-members  
**Limit:** 15

### Peacocks and Pagodas

**Monday through Thursday**  
**June 24-27 Classroom A**  
 (four sessions)  
**Section I: 10 a.m. to noon**

Please indicate your section on the registration form.

Enter into the world of the Chinese garden. Discover why emperors prized their mountain stones and ponds. Tour the Gardens and see the princesses' favorite flowers, including the peony. Find out how the Chinese have used roots and herbs to soothe and heal for thousands of years.

Learn why the cricket is called the Chinese music box. Watch silk-worms spin their cocoons and make your own painting on silk using a bamboo brush. Create an emperor or princess shadow puppet and learn how to make a peacock through the ancient art of papermaking.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$20 members/\$22 non-members  
**Limit:** 15

### Amazing Maize

**Monday through Thursday**  
**July 8-11 Classroom A**  
 (four sessions)  
**Section I: 10 a.m. to noon**

Please indicate your section on the registration form.

Learn all about the ancient corn plant which was discovered by the Indians who shared their secret with the pilgrims and settlers. See how the corn plant grows and watch the husks appear. Grind corn for a tortilla, make an Indian harvest mask, and a corn husk doll or wreath.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$20 members/\$22 non-members

**Limit:** 15

### Fruit Fizzle Pops

**Monday through Thursday**  
**July 15-18 Classroom A**  
 (four sessions)  
**Section I: 10 a.m. to noon**

Please indicate your section on the registration form.

Learn how to make great refreshing summer treats from plants. Discover some powerful little plants called yeasts and make your own soda pop that fizzles. Use yeast to make your own pretzels and find out how this little powerhouse helps bread rise. Use a solar fruit dryer and turn grapes into raisins. Use berries and jungle fruits to create a memorable ice cream.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$20 members/\$22 non-members  
**Limit:** 15

### More Good Guys and Bad Guys

**Monday through Thursday**  
**August 5-8 Classroom A**  
 (four sessions)  
**Section I: 10 a.m. to noon**

Please indicate your section on the registration form.

Who is peering at you through the grass? Learn about the many creatures that fly, roam, and crawl through a garden. Find out about their role as garden good guys and bad guys. Learn how the Gardens uses biological control, good guys fighting bad guys, to keep our plants healthy.

Discover why every garden should have ladybugs. Learn how to make creature catchers. See the ants' underground city, and take home a garden good guy (with your parent's permission) to protect your garden.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$20 members/\$22 non-members  
**Limit:** 15

### Dragonflies and the Nymph's Flowers

**Monday through Thursday**  
**August 12-15 Classroom A**  
 (four sessions)  
**Section I: 10 a.m. to noon**

Please indicate your section on the registration form.

Visit the Gardens' ponds and discover the creatures living in this aquatic habitat. See the waterlilies, the pond's floating flowers, and find out why their flowers are called stars. Discover the underwater plant



which traps swimming creatures with its one-way doors. Create a water-scope and examine the pond's hidden life.

Meet tadpoles, water tigers, and the dragonflies' nymphs. Learn how to make rainbows from pond water. Make a dragonfly or flying fish kite.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$20 members/\$22 non-members  
**Limit:** 15

### Samurais and Plum Blossoms

**Monday through Thursday**  
**August 19-22 Classroom A**  
 (four sessions)  
**Section I: 10 a.m. to noon**

Please indicate your section on the registration form.

Tour the ponds, bridges, and tea house of the Japanese Garden. See the bonsai trees that are 30 years old and only 12 inches high. Create a samurai kite, origami paper princess, and a paper dragon. Use a bamboo brush and rice paper to make your own scroll.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$20 members/\$22 non-members  
**Limit:** 15

*Jo Cannon discusses seed dispersal with students of "Seeds and Flowers."*

## For Children of Ages 8 to 11

### Dinosaur Salads

Monday through Thursday  
June 17-20 Classroom A  
(four sessions)  
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Please see class description on previous page.

### Peacocks and Pagodas

Monday through Thursday  
June 24-27 Classroom A  
(four sessions)  
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Please see class description on previous page.

### Amazing Maize

Monday through Thursday  
July 8-11 Classroom A  
(four sessions)  
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

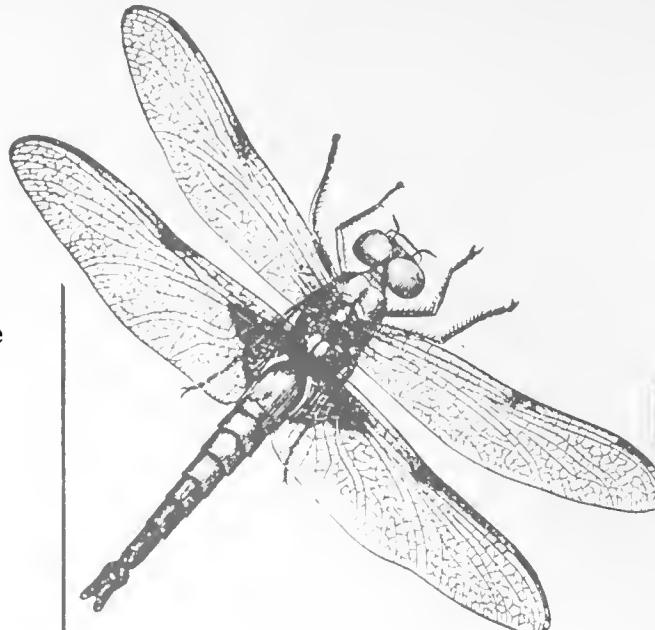
Please see class description on previous page.

### Fruit Fizzle Pops

Monday through Thursday  
July 15-18 Classroom A  
(four sessions)  
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Please see class description on previous page.



### Dragonflies and the Nymph's Flowers

Monday through Thursday  
August 12-15 Classroom A  
(four sessions)  
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Please see class description on previous page.

### Samurais and Plum Blossoms

Monday through Thursday  
August 19-22 Classroom A  
(four sessions)  
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Please see class description on previous page.

©1985  
JoDuranceau Cannon

### More Good Guys and Bad Guys

Monday through Thursday  
August 5-8 Classroom A  
(four sessions)  
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Please see class description on previous page.



Lew Keenan of Metro Pest Management discusses "Good Guys and Bad Guys."

Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

### Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

# L I B R A R Y

# L I N E S

Helen Fowler Library  
Volume 8, No. 2  
May 1985  
Edited by  
Jean Williams

Librarian:  
Solange Gignac

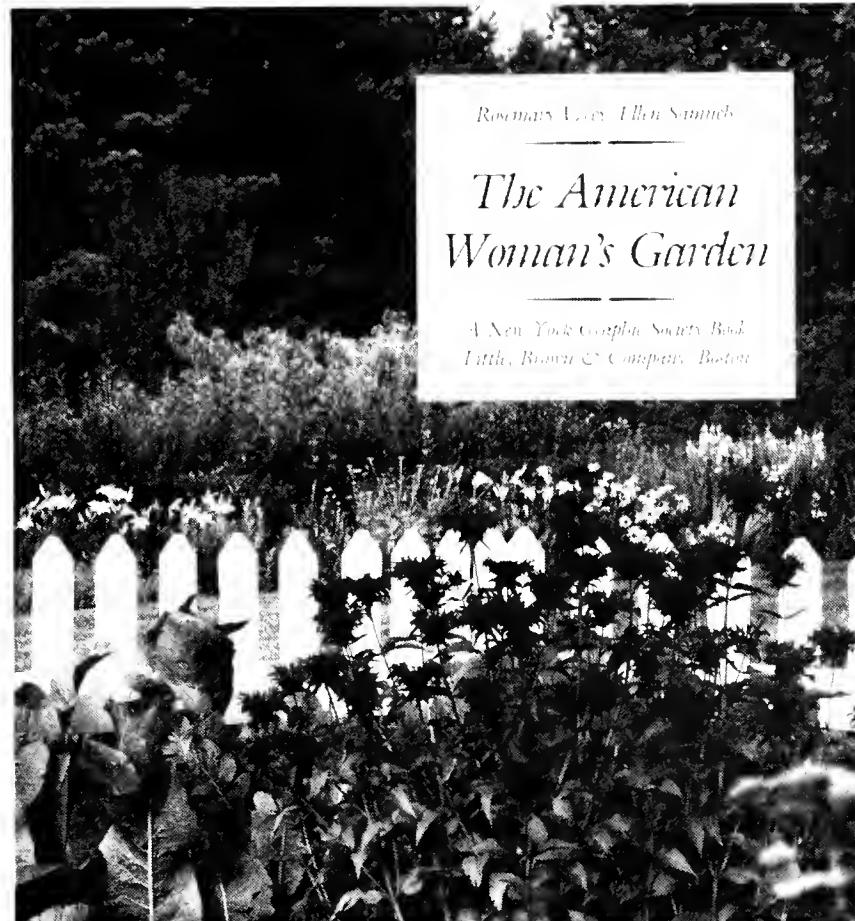
## The American Woman's Garden

By Rosemary Verey and Ellen Samuels. Little, Brown & Company, Boston, 1984. \$29.95. SB466 U6 V47 1984.

With trepidation I opened this book! I knew that "The American Woman" could in no way be described in all her diversity and charm in 31 short chapters, and I feared this description of "Her Garden" could only be similarly inadequate. My fears were justified, in part, for reasons I will explain.

Yet there is much of substance here and the format allows charm and variety. Each garden is described by the woman under whose authority it grows. Tidbits of the history of each garden, and of the personalities and life styles of the garden owners, come to us in this way. How delightful that each of these artists should be asked to tell her story in this public forum, perhaps the only opportunity for the creator herself to say what she considered the central idea and direction of her creation. Whether the garden is her handiwork alone, that of her immediate family, or the product of three or four gardeners working under her supervision, her voice and vision are expressed here.

The paintings are described briefly, with varying success in helping us visualize the overall effect. Two to six color pictures of each garden are included, each varying in stylistic quality. It is difficult to create a good picture of a three-dimensional artwork with such varied shades and textures as a garden. Perhaps another year's work would have been necessary to yield more pictures of the peak of bloom in each garden.



The plants themselves are described sometimes by common name, sometimes by Latin, or pseudo-Latin. While credit for these names is given to *Hortus Third*, Liberty Hyde Bailey must have turned over several times in his grave. What plant is *Archostasphylos* (page 129), and wherefore does *Acer palmatum 'Deshojo'* become *Acer palmatum deshojo* (page 93)?

The gardens were chosen by Rosemary Verey, English gardener and garden writer, and Ellen Samuels, American garden historian and designer; they were each selected from the visitors' list at Verey's garden and through grapevine communication of the Garden Club of America. It is no surprise then that many of these gardens are those of estates and historic properties.

This being said, it is no surprise that over half of the gardens are in New England and the three Pacific coast states, and five more are located in South Carolina and Georgia. Still, I was disappointed that only 18 of 50 states were represented. The central states are allowed one garden each in Minnesota, Wisconsin, Missouri, and Ohio. The Rocky Mountain region is brought to us in one Colorado Springs garden. The Great Basin is completely omitted, as is the arid Southwest. The Gulf coast region is represented by an azalea and greenhouse-grown tulip estate in Houston.

Gardening is an art which requires not only vision, the desire to work with soil and living, transitory things, but it also seems to require a heritage and tradition. Only one of the women whose gardens are

## THE REVIEWERS

Gwen Kelaidis—An avid gardener who freelances in design and nursery consulting

Jean Williams—Volunteer in the Helen Fowler Library, Denver Botanic Gardens

described admits to having no family role models in this respect. As parent's musical interests encourage the same in children, knowledge and inclination towards gardening seem to be acquired from early training and example, and perhaps inheritance.

Maybe the distribution of gardens chosen for this book is determined by the settlement pattern of the country rather than by simple prejudice in favor of the coasts and the rich. The English tradition of gardening may have come to the colonies most strongly, and there it has had the most generations to adapt. The coastal climates are also more similar to those of western Europe, whereas the mid-continent climate has fewer forerunners in horticulture. And so our English and historically-oriented authors were naturally inclined to select gardens which represented their own garden culture. I was glad to see one native-plant garden from the Midwest, but dismayed that there were none of the great dryland gardens of the Southwest. Were these too alien to our authors?

A more debatable question in my mind is whether disposable income is a prerequisite of the great garden. Just as many great and famous painters struggled to buy canvas and paint, there are gardeners who spend the grocery money on daffodils and drive old cars because they have spent the down payments on flowering shrubs, choice conifers, another load of topsoil or rocks, and dreams in nursery catalogs. That old car is better suited to bringing home plants acquired by the trusted garden tradition of beg, borrow, and trade. Perhaps it is not possible to create a great garden by these methods; after all, canvas and oils are a lot more permanent than gardens, which after three years of neglect are largely unrecognizable. But I had hoped to see more of these lesser-known creations of love in this book. I know they exist.

Very fine gardens are included, and you will enjoy reading about each and looking at the pictures. Behind the great gardens of every age lie the great gardens of the past, and it is interesting, even important, to preserve their traditions. We have too few records of this kind.

But many fine gardens of a new and different character await creation. The vision of people throughout the United States, their love of plants, and their courage will hopefully forge this new, uniquely American garden tradition.

Gwen Kelaidis

## Book Drop Added to Helen Fowler Library

The Helen Fowler Library now has a book drop. Located outside the library entrance, it provides a secure method of returning your

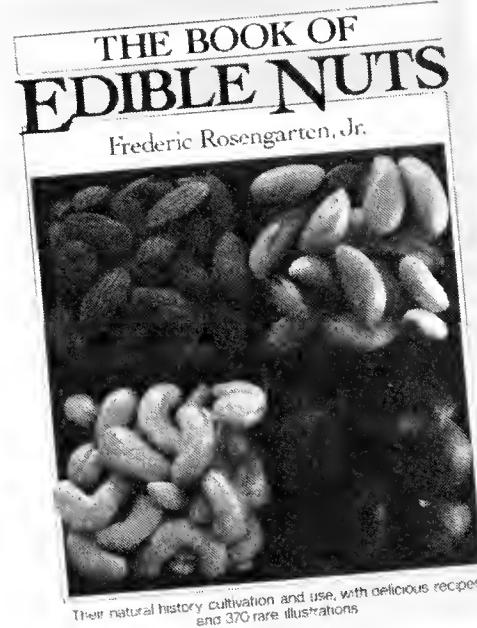
books when attending classes, meetings, or shows at the Gardens when the library is closed.



Assistant Librarian Joy Werlink

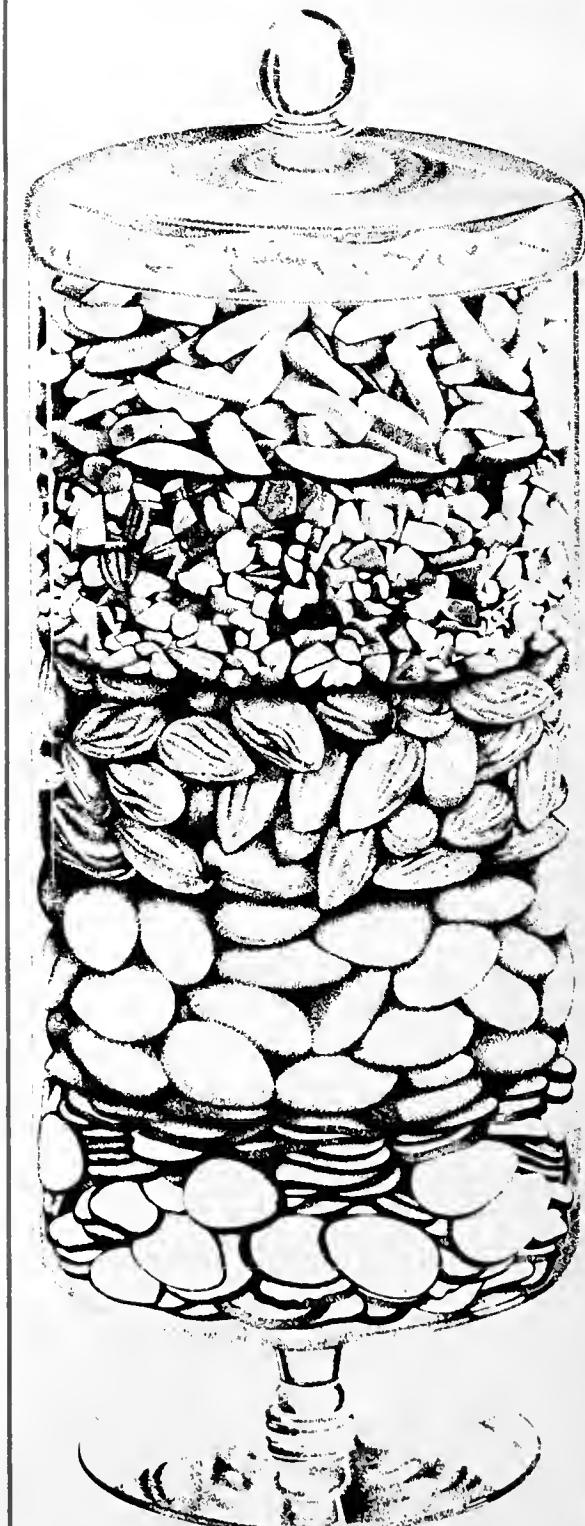
### *The Book of Edible Nuts*

By Frederic Rosengarten, Jr.  
Walker & Co., New York, 1984.  
\$35.00. SB 401 A4 R67.



This book contains only slightly more than you will want to know about edible nuts when you peek inside even though you are now unaware of any wish-to-know at all. You will be seduced. It is fascinating and comprehensive, filled with information, photographs, drawings, and historical graphics of all kinds. The book is excellently conceived, written, edited, designed, and illustrated. Interestingly, though no expense was spared in layout, it contains no color photography beyond the cover, only superb black and white photos.

Jean Williams



## Gardening Tips for May

March, April, and May are exciting months because at no other time are we more aware of plant growth than now. Some plants are just emerging, in others leaves or buds are expanding, and others are blooming. Although these obvious signs of growth comfort us, we rarely consider the myriad chemical reactions that make it happen.

The stages of plant growth and development result from physiological and environmental influences inside and outside the plant. These influences operate continuously and are responses to the many mini-factories of cells that chemically sustain the life of the plant. These cells are not static, but in a continuous state of dynamic balance.

All living things require food and water to survive. Oxygen and carbon dioxide from the atmosphere are not enough to provide materials for growth, maintenance, and repair. Simple molecules build into complex ones defined as carbohydrates, proteins, and lipids. These foods, as we know them, are mixtures of elements and for assimilation the plant must contain these elements in certain proportions. Although these materials are necessary for sustenance, it is difficult to calculate how much is needed at any one time.

Fertilizers are sources of elements used in plant growth. If used wisely, they can enhance the growth of a plant. However, they are not necessarily answers to plant problems. If other factors conducive to plant growth are available, then the fertilizers are effective.

There are 16 elements needed for plant growth. Carbon, hydrogen, and oxygen are extracted from the atmosphere or water; the others are provided through the growing medium. Any material, containing one or more of these essential elements, added to the soil or foliage is a fertilizer. The objective for the use of fertilizers is to provide adequate nutrients supplementing the capacity of the soil or other growing medium in order to promote plant growth.

Fertilizers may be categorized as natural organics which are derived from carbon compounds such as compost material composed of plant or animal parts; synthetic organics which are artificially synthesized, but have a carbon structure; and

inorganic fertilizers that neither have a carbon structure nor a composition of plant or animal parts.

The analysis or grade of fertilizer refers to the minimum percentage by weight of nitrogen (N), phosphorus ( $P_2O_5$ ), and potassium ( $K_2O$ ). A complete fertilizer ratio of 5-10-5 contains 5 percent nitrogen, 10 percent phosphorus, and 5 percent potassium.

Another consideration is the element's availability. Inorganic fertilizers are readily dissolved and available for root absorption. Organic (synthetic and natural) fertilizers must be broken down to simple elements before they are readily available. The rate of decomposition depends on several factors including plant, soil type, weather or moisture conditions as well as the plant's deficiencies.

Applications of fertilizers are recommended when the plant is in an active state of growth in spring, or even early fall for some crops. An important objective in timing fertilizer applications is to build carbohydrate reserves and promote root growth. Fertilizer is not a food. It provides elements that are absorbed by the roots and used in the metabolic process by which plants produce their own food through the chemical process, photosynthesis.

Judicious uses of fertilizer include suitable analysis, proper rate and timing of application, and the knowledgeable placement in the soil as well as common sense.

Gayle Weinstein  
Botanist Horticulturist at  
Denver Botanic Gardens



C

A

L

E

N

D

A

R

# CALENDAR

## Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

S

M

T

W

T

F

S

5  
Japanese Tea Ceremony

12  
Japanese Tea Ceremony

19  
20  
Miniature Baskets Workshop

26  
27

June 1  
Container Gardening, Field Trip to Bear Creek Nature Center

6  
7

13  
14

21  
Sweet Peas

28

June 4  
Field Trip to Roxborough State Park

8  
Mushroom Identification

15  
Plant Life Field Trip: Plainview Area

22  
23

June 9  
Japanese Tea Ceremony, Field Trip to Roxborough State Park

9

16  
Beginning Bonsai

24

June 14 & 15  
Rock Gardening Symposium

10  
Annual Plant and Used Book Sale

17  
Free Day for Denver City/County Residents

25

June 17  
Biological Control in the Home Garden, Urban Botany of Southeast Denver

11  
Annual Plant and Used Book Sale

18  
Bird Walk The Culinary Herbs, Field Trip to Roxborough State Park

26

June 22 & 23  
Denver Rose Society Show

25  
Miniature Baskets Workshop, Wonderful Wildflowers

31

June 24  
Young Audiences Concert

4  
All About Tomatoes, The Sultan's Treasure, Wildflower Field Trip

11  
Annual Plant and Used Book Sale

18  
Bird Walk The Culinary Herbs, Field Trip to Roxborough State Park

25  
Miniature Baskets Workshop, Wonderful Wildflowers

Coming Next Month

June 1 & 2  
Iris Society Show & Sale

June 29  
Pesticides in the Home Garden

June 24  
Peacocks and Pagodas

June 27

American Brass Quintet

Non Profit Org.  
U.S. Postage PAID

Permit No. 205  
Denver, CO

Denver Botanic Gardens, Inc.  
909 York Street  
Denver, Colorado 80206  
303-575-3751

May 1985

TIME VALUE

Address correction requested



# Green

# Thumb

# N

# E

# W

# S

## "Alpines Around the World: Bring the Rockies Into Your Garden" June 14 and 15

The third annual rock gardening symposium, "Alpines Around the World: Bring the Rockies Into Your Garden," will be presented by Denver Botanic Gardens and the Rocky Mountain Chapter of the American Rock Garden Society on Friday and Saturday, June 14 and 15 in John C. Mitchell II Hall.

A summer hike into the Colorado Rockies readily accounts for the pride and enthusiasm Coloradans display toward their floral wealth. Innovative gardeners have been experimenting with a profusion of wildflowers in an attempt to recreate this subtle beauty in their backyards. "Alpines Around the World: Bring the Rockies Into Your Garden" will explore the many ways rock gardening can help bring nature into the home landscape.

Denver offers a unique climate that permits the culture of moisture-loving plants of cooler climates as well as the many beautiful dryland plants currently being introduced to horticulture.

Participants will learn the basics of rock garden design including rock selection and placement as well as the wealth of available plant material that features such diverse groups as hardy cacti and succulents and miniature iris. Programs will be presented by distinguished horticulturists from the United States and England and will feature noted expert Michael Upward, Secretary of the Alpine Garden Society of Britain, well-known author and garden designer Pamela

*continued on page 4*

Denver Botanic Gardens

June 1985

Number 85-6



### Inside:

1985 Garden Concerts  
Young Audiences Concerts *page 6*

Classes for Adults *page 7*

Classes for Kids *page 9*

DBG Conservatory windows receive a spring cleaning.

## 2 Great Getaways: Great Lakes Tour September 8-19

The full itinerary of this exciting Denver Botanic Gardens' tour of the lower Great Lakes area is now available from Travel Associates (759-8666) and you are encouraged to make your bookings for this mid-September tour as places are limited.

Starting near Cleveland, Ohio on September 8 participants will visit Holden Arboretum, the Gardens of Kingwood Center, and Stan Hywet Hall.

The tour progresses to Dearborn, Michigan, to Greenfield Village and the Henry Ford museum, along with other Michigan museums, that will take you back into history and broaden your outlook on science and art. The Cranbrook House and Garden and Educational Community will provide a look at a delightful house and garden; after which a collection of private gardens will lead you to the Chicago area.

Moving into Illinois, the group will visit the relatively new Chicago Botanic Gardens and the strikingly modern geodesic domes of Milwaukee Botanical Gardens and nearby Boerner Botanical Gardens. Morton Arboretum and the Cantigny estate, built by the late Robert P. McCormick of the *Chicago Tribune*, are other destinations. Museums are very important elements of the city and ample time will be provided for leisurely browsing.

### Tributes

#### In memory of Hazel Caton

Mr. & Mrs. J. A. Deter

#### In memory of Jeanette Cohen

Mary Jo Christenson

Herbert & Beatrice Jones

Gladys & Bud Martin, Nancy & Kim

Beverly Nilsen

Charlie & Jonni Paxton

John & Fran Regner

Joyce & Gene Schillen

#### In memory of L. Richard Girouard

Margaret Altvater

#### In memory of Jayme McLean

Virginia F. Beatty

Martha Z. Bomford

Rosemary L. Cashman

Marjorie Dougherty

Terry Doyle

Mr. & Mrs. Joseph N. Emmons &  
Rebecca Dee Emmons

R. L. "Randy" Gantvoort

Blair A. Siegle

Linda Slobodin

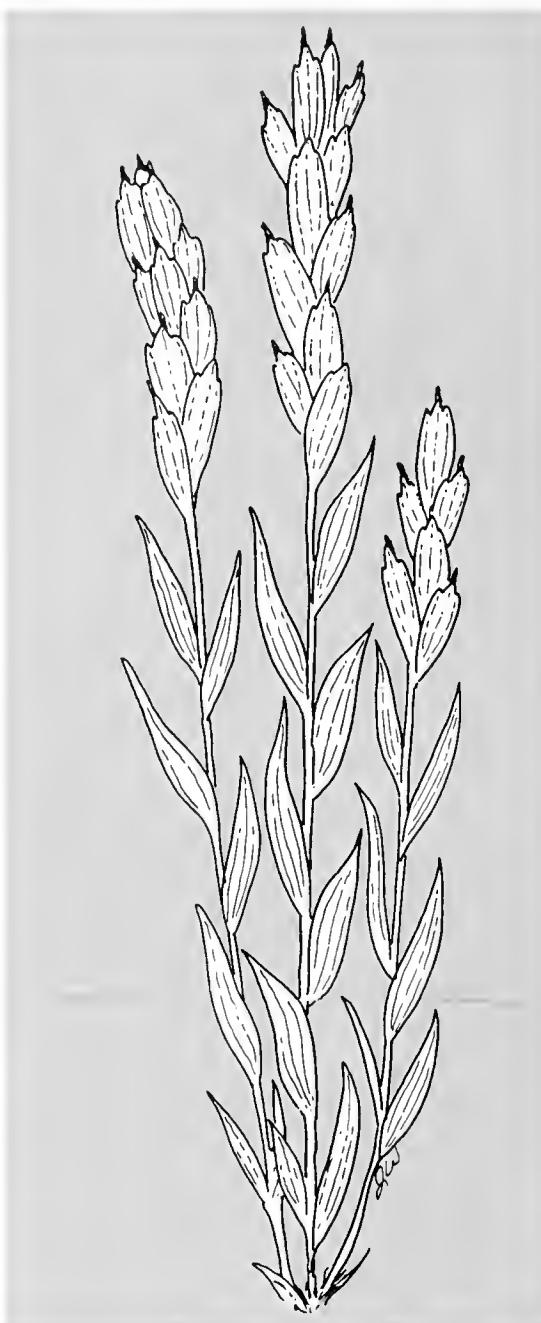
William Matthews VFW Auxiliary

1585

#### In memory of F. L. "Steve" O'Rourke

Kep, Rae, Ed & Julie Kleppermann

A visit to several more private gardens will round out a fascinating tour to some of the Mid-West's finest offerings. For additional information, please contact DBG Assistant Director Andrew Pierce at 575-3751, extension 18.



#### In memory of Kyle Schlessman

His friends and friends of his family

Mr. & Mrs. Jim Harmon & Dick

Mr. & Mrs. Larry McClelland

Mr. & Mrs. Jim Parsons

#### In memory of Isabel McIlvaine Steltzner

Elizabeth H. Bardwell

James D. Gibson, M.D.

Mr. & Mrs. Robert Haack

Mary Lou Kidder

Elizabeth R. Myer

Mr. & Mrs. Jerome K. Nagel

Mrs. William M. Reno

Mr. & Mrs. John W. Tempest

#### In memory of Jack Wallace

Margaret Altvater

Phyllis L. Daniel

Myron & Nancy Dunn

Lewis & Mildred Hoobler

Anna-Lisa Moline

J. Greg & Sharon Moore

Bette J. Nystrom

Douglas & Marion Sikes

Doug & Jo Smith

Eleanor L. Vandell

Margaret Wallace

## Fourth Annual "Garden Party" Benefit July 19

Enjoy "Hot Jazz into the Cool Night" when Denver Botanic Gardens hosts its Fourth Annual Garden Party, Friday, July 19.

The Garden Party, a benefit for Denver Botanic Gardens, will feature the smoky song-stylings of jazz artist Betty Farmer, voted "Denver's Most Popular Female Singer" in the recent 1985 *Denver Post* Music Poll.

The Botanic Gardens, 1005 York Street, will open its gates at 5:30 p.m. to allow Garden Party guests time to enjoy cocktails from a cash bar and stroll through the outdoor gardens during their peak of summer bloom. A gourmet picnic supper will be served at 7 p.m.

The concert, the syncopated silkiness of Betty Farmer and her back-up band, will get underway at 8 p.m. Guests are encouraged to bring a blanket and sit on the grass of the Botanic Gardens outdoor amphitheater while listening to Farmer and her band perform elegant jazz renditions.

Tickets to the event are \$40 per person and will go on sale June 1. They can be obtained by returning the reservation form inserted in this *Green Thumb News*. All reservations must be received no later than Monday, July 15.

For more information, please call Denver Botanic Gardens Development Office at 355-3456.

### Green Thumb News Number 85—6 June 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp.

Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than May 20 for July, June 20 for August, and July 19 for September.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the  
American Association  
of Museums

## National Horticultural Therapy Conference at DBG

Denver Botanic Gardens and the Central Rocky Mountain Chapter of the National Council for Therapy and Rehabilitation through Horticulture (NCTRH) will co-sponsor the 13th annual conference for NCTRH. "Striving for Balance: the Horticulturist/the Therapist" is the theme of the conference to be held at DBG July 21 to 25.

Experimental and educational workshops will be designed to encourage participants to play an active role in the conference. Topics have been chosen to provide a well-rounded program pertaining to horticulture and therapy. Participants will learn how to analyze horticultural activities, apply counseling techniques in non-traditional settings, and establish a horticultural therapy program. Many other pertinent topics will be discussed in the sessions.

The pre-registration fee for the entire program is \$120 and registrants will be charged \$130 after July 1. The student fee is \$90 and a daily fee of \$50 has also been set. For an additional small charge, Colorado State University is offering one college credit hour and continuing education credit to conference participants.

For further information, please contact Judy Carrier, DBG horticultural therapist, at 575-3751, extension 42.

## Annual Terrace and Garden Tour July 20

The Denver Botanic Gardens' Guild announces the 26th Annual Terrace and Garden Tour on Saturday, July 20 from 9 a.m. to 5 p.m. This year's tour concentrates on owner-maintained terraces of seven houses on Sunset Drive in Cherry Hills Village.

Of special interest this year is the concept of a "Park and Walk" tour. Sunset Drive is a one-mile circular road that includes some outstanding terrace gardens. Visitors can park their cars at the entrance to Sunset Drive and walk from house to house. A shuttle bus will be available for those unable to walk the route.

Tickets are \$8 and will be available after June 12 from Guild members and at the DBG Gift Shop or at the Sunset Drive entrance the day of the tour. A map, garden descriptions, and refreshments will be provided for all ticketholders. The July *Green Thumb News* will contain additional information on this exciting annual event.

## Asian Festival Set for July 27-August 4

Exotic food, entertainment, and exquisite Asian art will highlight the Third Festival of Asian Arts and Culture held at Denver Botanic Gardens July 27 through August 4.

Sponsored by the Asian Pacific Development Center, DBG, and many of the Asian communities in Denver, the festival offers visitors a unique chance to experience the art, dance, traditions, customs, and foods of more than 10 different cultures.

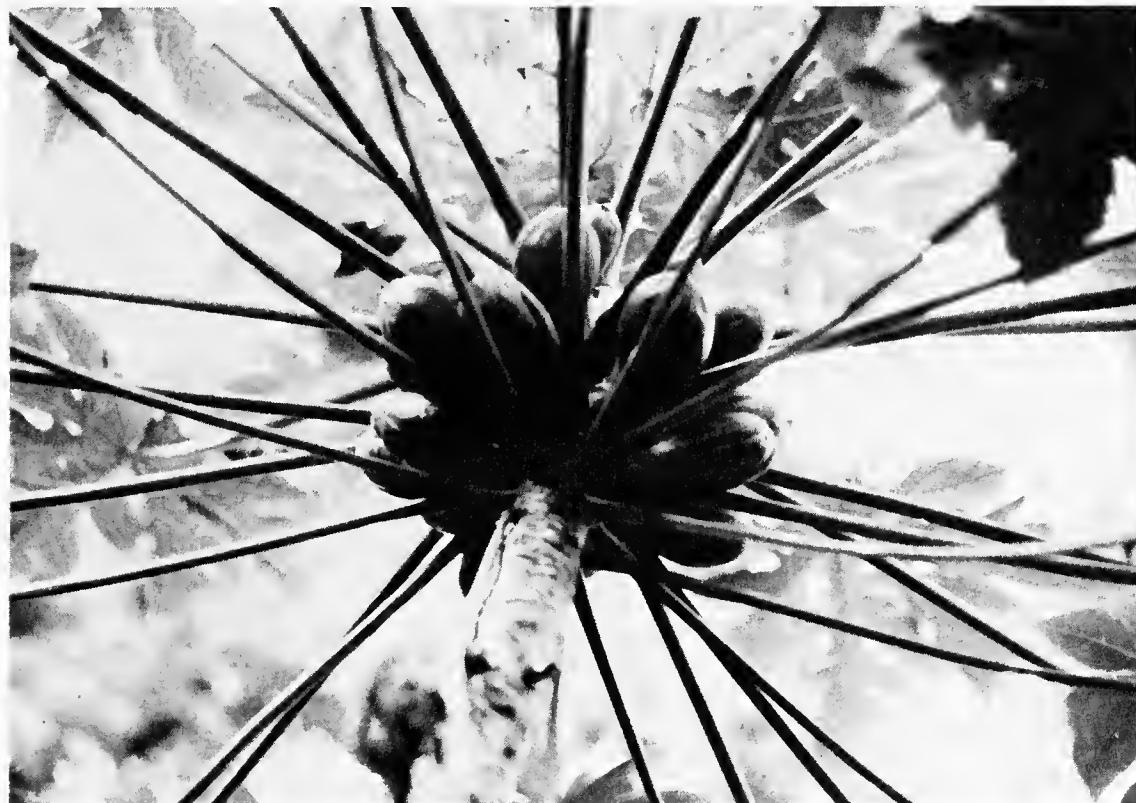
A special highlight of this year's festival will be the exhibition of select pieces from the Denver Art Museum's Asian Art Department. This exhibit, in John C. Mitchell II Hall, will be open to the public

throughout the festival's 10-day period.

Beginning on Friday, August 2 and continuing through Sunday, August 4, the festival will include three nights of Asian performing arts. Food from some of Denver's best Asian restaurants will also be sold.

Tickets for each evening performance are \$4 for adults, \$3 for senior citizens (65 and older) and \$2 for children (under 12).

For ticket information, contact the Asian Pacific Development Center at 393-0304. A schedule of all activities, including special educational events, will be published in the July *Green Thumb News*.



Fruiting papaya in our Conservatory.

## Extended Evening Hours

The best times to be in the garden, wrote an anonymous poet, are in "mornin' aire and evensong."

Starting Monday, June 10 and running through Labor Day (Monday, September 2), Denver Botanic Gardens will be open from 9 a.m. until dusk on Mondays, Wednesdays, Saturdays, and Sundays so that Garden-goers can better enjoy the display gardens in the cool evening air. In addition, the Helen Fowler Library will be open Monday evenings until dusk. Artists and photographers can also take advantage of the lower and softer light.

Garden evening dates and exceptions to the Monday-Wednesday-Saturday-Sunday schedule will be published in each month's *Green Thumb News* throughout the summer. Please note there are no exceptions between June 10 and June 30.

Bring friends and visitors to the Gardens during the evening hours and enjoy our gardens at their peak. Members with memberships providing for guest privileges should plan to introduce the gardens to friends and family this summer during the evening hours.

## "Alpines Around the World (cont.)

Harper, and nurserymen such as Steve Doonan and Phil Pearson of Grand Ridge Nursery, Washington, and Betty Ann Mech, proprietor of the highly regarded Rice Creek Gardens.

Demonstrations and a variety of workshops from which to choose will be available on both days. Small group workshops will provide the opportunity to meet speakers on a one-to-one basis. Rock gardening exhibits and a plant show and sale will be open to the public.

Although the deadline for pre-registration is Wednesday, June 5, walk-in registrations will be accepted, on a space available basis, on the days of the symposium. "Alpines Around the World: Bring the Rockies Into Your Garden" promises to provide stimulating inspiration to both the beginning and advanced rock gardener. Register now to ensure your choice of workshops and demonstrations.

## PROGRAM: Alpines Around the World

### Friday, June 14, 1985

8:30 a.m.—Registration  
9:00—Opening remarks  
Merle M. Moore, Executive Director of Denver Botanic Gardens

9:15—"Cultural Basics: What a Plant Wants" Steve Doonan and Phil Pearson, proprietors of Grand Ridge Nursery, high in the Cascade Mountains of Washington, are renowned for their skill in growing and propagating rare plants. Here they will examine the basic elements of the art of gardening: air, soil, roots, and water.

10:00—"Design in the Natural Garden" Pamela Harper is the author of the forthcoming HP Perennial book and an authority on garden design and rock gardening. In this program she will examine the pitfalls that discourage the home gardener. Just how can you use these plants effectively in your own garden?

10:45—Coffee Break

11:00—Demonstrations and Workshops: Session I. Choose from one of the following: (1) Native Plants You Should Know and Grow (2) What Your Neighbors Grow (3) Nurserymen's Choice (4) Culture and

Handling of Cacti (5) The Confounding Composites (6) Tour of the Rock Alpine Garden

12:00 p.m.—Lunch Break: An optional lunch will be provided in John C. Mitchell II Hall.

1:00—"The Dryland Garden: Cacti and Succulents in the Rocky Mountain Garden" There has been much talk lately of "xeriscape." Allan Taylor and Rod Haenni are knowledgeable horticulturists who have the practical experience necessary to guide us through this spiny subject.

2:00—"The Legacy of Claude Barr" Claude Barr devoted sixty years of his life to the selection, culture, and dissemination of Great Plains wild-flowers which culminated in his *Jewels of the Plains*. His friend and associate, Betty Ann Mech, will introduce us to the life of this great man and his plants.

3:00—Demonstrations and Workshops: Session II. Choose another of the subjects from Session I.

4:00—Plant Sale and Exhibits close for the day

### Saturday, June 15, 1985

8:30 a.m.—Second day registration

## Alpines Around the World Registration Form

Please send registration form to Denver Botanic Gardens.

Name \_\_\_\_\_ Print name as you want it to appear on badge

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime phone \_\_\_\_\_ DBG Member: Yes  No

Additional registrants:

1) \_\_\_\_\_

2) \_\_\_\_\_

I have enclosed \$ \_\_\_\_\_ for \_\_\_\_\_ people on the following days:

Both Days \$26.00 per person \_\_\_\_\_, lunch: \$12.00 \_\_\_\_\_,

Friday, June 14 \$14.00 per person \_\_\_\_\_, lunch: \$ 6.00 \_\_\_\_\_,

Saturday, June 15 \$14.00 per person \_\_\_\_\_, lunch: \$ 6.00 \_\_\_\_\_,

Send to: Alpines Around the World; Denver Botanic Gardens;  
909 York Street; Denver, Colorado 80206.

Friday, June 14: Workshops and Demonstrations (Please mark two choices [X] and an alternative [A] for each day).

- Native Plants You Should Know and Grow (Jim Borland)
- What Your Neighbors Grow (Anthology of local gardens by members of the Rocky Mountain Chapter)

### Optional Total

Nurserymen's Choice: Pat Thorn of Little Valley Wholesale Nursery

Culture and Handling of Cacti (Allan Taylor, Rod Haenni)

The Confounding Composites (Sandra Snyder)

Tour of the Rock Alpine Garden

Saturday, June 15: Workshops and Demonstrations (Please mark two choices [X] and an alternative [A] for each day.)

- Native Plants You Should Know and Grow (Jim Borland)
- What Your Neighbors Grow (Anthology of local gardens by members of the Rocky Mountain Chapter)
- Nurserymen's Choice—Dermod Downs of Country Lane Nursery
- Culture and Handling of Cacti (Allan Taylor, Rod Haenni)
- Dwarf Bearded Iris for the Rock Garden (Harry Kuesel)
- Tour of the Rock Alpine Garden

Make checks payable to Denver Botanic Gardens. Registrations will not be acknowledged; your cancelled check serves as your receipt. Pre-registration is advised, however, and if space is available, participants are welcome to register at the door. Please note that space in the workshops and demonstrations is limited and late registrants may not be accommodated in their first choices.

9:00—Opening remarks  
Stan Metsker, President Rocky Mountain Chapter, American Rock Garden Society

9:10—"From the Ground Up: The How-To of Rock Gardens" In addition to operating Rice Creek Gardens, a highly regarded mail-order nursery, Betty Ann Mech designs and builds rock gardens not only for private homeowners, but for the city of Minneapolis as well. She will illustrate the do's and don't's of rock garden construction.

10:00—"Plants and Rocks—the Next Step" Michael Upward, Secretary of the Alpine Garden Society of Britain for twenty years, has just published the newest handbook on rock gardening. He will give a state-of-the-art review of how to create an exciting, contemporary rock garden.

10:45—Coffee Break

11:00—Demonstrations and Workshops: Session III. Choose from one of the following: (1) Native Plants You Should Know and Grow (2) What Your Neighbors Grow (3) Nurserymen's Choice (4) Culture and Handling of Cacti (5) Dwarf Bearded Iris for the Rock Garden (6) Tour of the Rock Alpine Garden

12:00 p.m.—Lunch Break: An optional lunch will be provided in John C. Mitchell II Hall.

1:00—"From the Wild Into Your Garden" Phil Pearson and Steve Doonan are regarded as two of the finest rare plant nurserymen on this continent. In this presentation they will describe how they select (sometimes at great peril!) wild plants for propagation, without ever collecting a single plant.

2:00—"Glories of the Garden" Panayoti Kelaidis, Curator of our Rock Alpine Garden, will introduce the wealth of bulbous plants that can enrich our gardens. Cultural information and sources will be provided.

3:00—Demonstrations and Workshops: Session IV. Choose another of the subjects from Session III.

4:00—Symposium adjourned

4:30—Plant Sale and Exhibits close

In addition, the Rocky Mountain Chapter of the American Rock Garden Society invites you and guests to an illustrated lecture by Michael Upward, Secretary of the Alpine Garden Society of Britain. Please note that there is no additional charge for this program.

7:30—"Plant Hunting in the Sikkim Himalayas"



*Sempervivum*  
*sp.* in our Rock  
Alpine Garden.

## Smith College Botanic Garden Featured in Lecture

Dr. Richard H. Munson, Director of Smith College Botanic Garden in Northampton, Massachusetts, will present a free illustrated program on Wednesday, July 31, at 7 p.m. at Denver Botanic Gardens House. Titled, "The Campus Botanic Garden—A Blend of Academic and Public Horticulture," the lecture will feature the beautiful 300-acre campus of Smith College which serves as a plant study laboratory for students and a display garden for the public.

Although there is no charge for the program, seating is limited and advance reservations are required. Please contact Education Assistant Carol Knepp at 575-3751, extension 20, to reserve your place.

Alpines Around the World  
Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

## 6 | 1985 Garden Concert Series

Denver Botanic Gardens, KCFR 90.1 FM, United Bank of Cherry Creek, and United Bank of Denver are pleased to present this summer's Garden Concert Series at DBG. The American Brass Quintet will open the season on Thursday, June 27 and will be followed by an expanded series of eight concerts in the Gardens' amphitheater.

Please note that the Cleo Parker-Robinson Dance Ensemble, the Colorado Philharmonic, and Hot Rize will each perform on two consecutive evenings. This summer's updated program is as follows:

**American Brass Quintet:** Music from the Aspen Music Festival. Thursday, June 27 at 7:30 p.m. (rain date—Sunday, June 30 at 10 a.m.) Gates open at 6 p.m. *Tickets on sale starting Friday, June 14.*

**Cleo Parker-Robinson Dance Ensemble.** Thursday, July 11, or Friday, July 12 at 7:30 p.m. (rain date—Sunday, July 14 at 10 a.m.) Gates open at 6 p.m. *Tickets on sale starting Friday, June 28.*

**The Colorado Philharmonic.** Thursday, July 25 or Friday, July 26 at 7:30 p.m. (rain date—Sunday, July 28 at 10 a.m. Gate opens at 6 p.m. *Tickets on sale starting Friday, July 12.*

**Boulder Bassoon Band.** Thursday, August 8 at 7:30 p.m. (rain date—Sunday, August 11 at 10 a.m.) Gates open at 6 p.m. *Tickets on sale starting Friday, July 26.*

**Hot Rize.** Thursday, August 22 or Friday, August 23 at 6:30 p.m. (rain date—Sunday August 25 at 10 a.m.) Gates open at 5:30 p.m. *Tickets on sale starting Friday, August 9.*

**Colorado Wind Ensemble.** Thursday, September 5 at 6:30 p.m. (rain date—Sunday, September 8 at 10 a.m.) Gate opens at 5:30 p.m. *Tickets on sale starting Friday, August 23.*

Tickets will be sold at the following places including, for the first time, a Boulder location:

- Denver Botanic Gardens House at 909 York Street will be open weekdays from 7 a.m. to 5 p.m.
- KCFR 90.1 FM Radio at 2249 South Josephine will be open weekdays from 7 a.m. to 5 p.m.
- United Bank of Cherry Creek in the Ptarmigan Center on Cherry Creek Drive North will be open weekdays from 7 a.m. to 5 p.m.

- United Bank of Denver at 1740 Broadway will be open weekdays from 7 a.m. to 5 p.m.
- Listen-Up Audio and Video Systems at 2034 Arapahoe, Boulder, will be open 10 a.m. to 8 p.m. weekdays and 10 a.m. to 6 p.m. Saturdays.

Non-refundable tickets for each performance are \$3 each for members of Denver Botanic Gardens or KCFR (proof of membership will be required at time of purchase) and non-member tickets are \$5 each. All will be sold on a first come, first served basis with a limit of four tickets per person.

All programs (except Cleo Parker-Robinson Ensemble) will be broadcast live by KCFR at 90.1 FM. If a concert is threatened by bad weather, listen to KCFR (beginning at 4 p.m.) for an announcement of the status of the Thursday or Friday evening concerts.



Recent "Young Audiences" participants.

### Young Audiences Concerts

"Practice, practice, practice!"

Any child who was forced into music lessons remembers that admonition. And those three words have turned many a child off of music, says Kathryn Vanneman, executive director of Young Audiences, Inc.

Young Audiences, Denver Botanic Gardens, and the Coors Foundation will present a pleasant alternative this summer for parents seeking to instill an interest in good music in their children: The Young Audiences Garden Family Concerts.

Headlining the first Young Audiences Garden Family Concert, June 18, will be Woodwinds 4 + 1, a Denver group that features Victoria Bell on flute, James Harvey on bassoon, Guy Dutra-Silveira, oboe, Ray Kireilis, clarinet, and Ron Torp, on French horn.

In a recent Young Audiences concert for elementary school children, Woodwinds 4 + 1 invited the children to explore musical elements such as beat, rhythm, melody, and harmony.

This summer's program features everything from classical (Woodwinds 4 + 1) to dance (Grant Street Dance Company) to jazz including sounds from the Caribbean.

The summer schedule for the Young Audiences concerts is as follows:

The summer schedule for the Young Audiences concerts is as follows:

**Woodwinds 4 + 1.** Tuesday, June 18 at 6:30 p.m. (rain date—Tuesday, June 25 at 6:30 p.m.) Gates open at 6 p.m. *Tickets on sale starting Monday, June 3 at 7 a.m.*

**Grant Street Dance Company and Toys Percussion.** Tuesday, July 16 at 6:30 p.m. (rain date—Tuesday, July 23 at 6:30 p.m.) Gates open at 6 p.m. *Tickets on sale starting Monday, July 1 at 7 a.m.*

**Jazz and Latin American music.** Tuesday, August 20 at 6:30 p.m. (rain date—Tuesday, August 27 at 6:30 p.m.) Gates open at 6 p.m. *Tickets on sale starting Thursday, August 1 at 7 a.m.*

All tickets will be sold at the Denver Botanic Gardens House, 909 York Street, in the Main Room. Tickets for these evening concerts are \$2 each and children under two will be admitted free. If tickets are available the night of the concerts, they will be sold at the gate.

Plan now to spend time with your children or grandchildren at these special concerts. Enjoy these performances and the surprises that will be included for your entertainment.

## Help the Gardens Grow!

Please make \_\_\_\_\_ reservations for me at \$40.00 each.

Total enclosed: \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone: daytime \_\_\_\_\_

Zip Code \_\_\_\_\_

evening \_\_\_\_\_

Your check is your reservation.

All reservations *must be received* not later than Monday, July 15. Please make your check payable to *The Garden Party*, and send to Denver Botanic Gardens, Development Office, 909 York Street, Denver, Colorado 80206. Thank you for joining us in a worthy cause.

# *The Garden Party*

## *A Benefit for Denver Botanic Gardens*

J

A

Z

Z

### **Hot Jazz into the Cool Night**

a gourmet picnic supper and jazz concert featuring vocalist Betty Farmer. (Voted Denver's Best Female Singer, Denver Post 1985 Music Poll).

**Friday evening,  
July 19, 1985**

5:30 p.m. gates open, cash bar

7:00 p.m. picnic supper served

8:00 p.m. Jazz concert

tickets \$40 per person  
reservations must be received by July 15

Bring a blanket and sit on the grass of the Botanic Gardens outdoor amphitheater. Enjoy the box picnic supper in any of the numerous specialty gardens which will be filled with summer blooms. Picnic and concert inside in case of rain.

Denver Botanic Gardens  
1005 York Street  
For further information,  
please call the Botanic  
Gardens Development Office  
at 355-3456.





# CLASSES

Summer  
1985  
Denver Botanic Gardens

## More Gardening for Results

Saturdays from 10 a.m. to noon at DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue. Please indicate your program titles if you are not attending the entire series.

### Saturday, June 1 Container Gardening

Expand your gardening space by learning how to grow flowers and vegetables in containers. Types of containers, appropriate soil mixes, and plant varieties along with good cultural techniques will be covered.

### Saturday, June 15 Biological Control in the Home Garden

Biological control is the use of natural enemies to reduce destructive insect populations. This is an opportunity to learn some insect life cycles and their natural predators. Learn what to purchase and how to apply it for maximum results.

### Saturday, June 29 Pesticides in the Home Garden

In this introduction to proper pesticide use, students will learn the difference between organic and botanical pesticides, safe application and timing techniques, and how to mix and dispose of the commonly used home pesticides.

### Saturday, July 13 Fall Vegetable Gardening

Many vegetables, especially members of the cabbage family, can be planted in the summer and will grow past the fall frost date until the ground freezes. Learn the specifics of this season-extending practice including what and when to plant as well as how to avoid common problems.

### Saturday, July 27 Insects: What's Bugging You?

In this introduction to horticultural entomology, students will learn insect life cycles of familiar Colorado pests including the proper stage of control. Preventive techniques will be stressed and the class will conclude with a walking tour of the Community Gardens to observe garden insects.

**Instructors:** Jim Borland, Larry Latta, Pat Pachuta, Lynn Thompson, and Gayle Weinstein are all horticulturists on the staff of Denver Botanic Gardens and John Brett is the former coordinator of our community gardening program.

**Fee:** Each program is \$8 or choose three for \$20, or all five for \$36.

## Botanical Illustration: Roses

Tuesdays, June 25, July 2, 9, 16, 30  
August 6 (skip July 23)  
(six sessions)  
9:30 to 11:30 a.m. Classroom B

Pierre-Joseph Redoute is well known for his beautiful flower paintings of which his exquisite rose illustrations are undoubtedly the most familiar. In this summer course, students will learn to draw roses from DBG's May Stanton Bonfils Rose Garden with pencil and pen and ink and will continue on to work with watercolors. Beginning and advanced students are encouraged to attend and heighten their appreciation of some of the season's loveliest flowers.

**Instructor:** Angela Overy received her National Diploma of Design from London University, England, and designed in London, New York, and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest



*Botanical illustration student Anna Lisa Moline.*

and ability in her enthusiastic classes and lectures.

**Fee:** \$53 members/\$58 non-members (includes \$5 for materials).

**Limit:** 20

## Arranging Lessons with Fresh Flowers

Mondays, July 15, 22, 29, August 5  
(four sessions)  
9:30 a.m. to noon Classroom B

Summer is the perfect time to learn how to make floral arrangements that will complement a favorite spot in your home. Students will learn how to select and cut fresh flowers for arrangements that will be prepared in class.

Please bring two containers (no glass or silver), two needle-point holders for flowers, clippers, scissors or knife, and one large bucket for gathering flowers. All other materials, including flowers, will be provided.

**Instructor:** Avalonne Kosanke is a master flower show judge for the National Council of State Garden Clubs and has over 25 years of teaching experience.

**Fee:** \$44 members/\$48 non-members (includes a \$4 materials fee).

**Limit:** 15

## Japanese Tea Ceremony

Section VII:	Saturday, June 15
Section VIII:	Saturday, June 29
Section IX:	Saturday, July 6
Section X:	Sunday, July 14
Section XI:	Saturday, July 20 (one session) 2 to 3 p.m.
Tea House in DBG's Japanese Garden	

Please indicate your section on the registration form.

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility, and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

**Instructor:** Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

**Fee:** \$4.50 members/\$5 non-members

**Limit:** 15



## Urban Botany of Southeast Denver

**Saturday, June 15**  
9 a.m. to noon

Participants on this field trip will learn that it isn't necessary to travel long distances to botanize. Explore Bible Park and Cherry Creek Park areas and become acquainted with the many pretty flowers that inhabit these nearby areas. Meet the often overlooked plants of our city streets and parks.

**Leader:** Richard Schwendinger

**Meet:** at 9 a.m. at the DBG House parking lot.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 20

### Plant Life Field Trip: White Park Ranch

**Wednesday, June 19**  
9 a.m. to 4 p.m.

White Park Ranch, a beautiful area of open ponderosa pine forests and grasslands, is a delightful place to observe early summer wildflowers. Expect a profusion of lupines, senecios, penstemons, larkspurs, and wand lilies. In addition, a number of interesting pieces of early farm equipment can be seen on this pioneer homestead.

Please bring a lunch and drinking water.

**Leader:** Mary Edwards is an enthusiastic botanist who volunteers in the Kathryn Kalmbach Herbarium at DBG.

**Meet:** at 9 a.m. at Denver Botanic Gardens House to carpool and share gasoline expenses.

**Fee:** \$2 per person

**Limit:** 20

### Field Trip to Golden Gate Park

**Saturday, June 29**  
10 a.m. to 3 p.m.

This park probably contains the best array of foothill's wildflowers in the Denver vicinity. A profusion of shooting stars, anemones, and larkspurs is expected. Join us on a leisurely walk and brush up on your identification skills. Don't forget your picnic lunch.

**Leader:** Richard Schwendinger has been leading field trips throughout North America and Alaska for over 25 years.

**Meet:** at 10 a.m. at the Park's Nature Center.

**Fee:** \$2.50 members/\$3 non-members  
Each car entering the park must purchase a daily user pass in addition to the field trip fee.

**Limit:** 15

### Field Trip to Wild Basin, Rocky Mountain National Park

**Sunday, July 14**  
1 to 4 p.m.

Come and explore Wild Basin, a lovely, unspoiled valley of pristine beauty. The mixed conifer and aspen forest is an excellent habitat to observe many of our summer-blooming wildflowers, including some of the smaller orchids.

**Leader:** Richard Schwendinger

**Meet:** at 1 p.m. at the Wild Basin parking lot. Take Route 7 north out of Allenspark, follow for approximately two miles, and turn left at the Wild Basin sign.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 15

### Field Trip to Second Creek

**Tuesday, July 16**  
6:30 a.m. to 4 p.m.

This is a moderately strenuous hike to Second Creek, located near Berthoud Pass on U.S. 40. A four-mile round trip distance with a 1200-foot elevation gain will be covered.

This unusually wet high mountain creek area is noted for its lush vegetation and participants can expect to see a profusion of early summer sub-alpine flowers such as Parry's primroses, globeflowers, and marsh marigolds. Above timberline, a fine selection of tundra flowers is anticipated.

Come prepared: Bring sunglasses, sunscreen, rain gear, lunch, and drinking water in a day pack and wear hiking boots.

**Leader:** Bob Heapes is an experienced field trip leader and nature photographer, and is also an amateur naturalist at Roxborough State Park. His congenial leadership makes his trips increasingly popular.

**Meet:** at 6:30 a.m. in the DBG parking lot.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 20

## Field Trip to Mount Goliath

**Sunday, July 21**  
8 a.m. to 3 p.m.

Tundra wildflowers hold a special fascination for both amateur and professional botanists and Mount Goliath is an exceptional place to observe them. Carpets of dainty wildflowers are complemented with grand mountain vistas and the sculptured, grizzled beauty of bristlecone pines.

Join two experienced field trip leaders and walk the M. Walter Pessman Trail, a winding 1½ mile,



Mount Goliath field trip.

downhill path at 12,100 feet. Please bring your lunch and drinking water and dress appropriately.

**Leaders:** Panayoti Kelaidis is curator of the Rock Alpine Garden at DBG and is an enthusiastic and capable field botanist. Bob Heapes, an experienced hiker and nature photographer, is also an amateur naturalist at Roxborough State Park.

**Meet:** at 8 a.m. in the DBG parking lot. Bus transportation will be provided. Please be prompt.

**Fee:** \$12 members/\$13 non-members (includes Janet L. Wingate's brochure, *Alpine Wildflowers of Mount Goliath*, as well as bus transportation).

**Limit:** 45

## Just for Kids Summer Schedule

Your children can still enroll in DBG's summer program of exciting classes. Throughout June, July, and August a series of Monday through Thursday classes will meet in our classrooms. Children 5 to 7 years old can attend sessions from 10 a.m. to noon and children 8 to 11 years old can attend afternoon sessions from 1 to 3 p.m.

The member registration fee for each four-day course is \$20 and non-members can register for \$22. Pre-registration is necessary and information can be obtained by calling the Education Department, 575-3751, or referring to your May, 1985 *Green Thumb News*.

The summer classes are as follows:

June 17 to 20	Dinosaur Salads
June 24 to 27	Peacocks and Pagodas
July 8 to 11	Amazing Maize
July 15 to 18	Fruit Fizzle Pops
August 5 to 8	More Good Guys and Bad Guys
August 12 to 15	Dragonflies and the Nymph's Flowers
August 19 to 22	Samurais and Plum Blossoms

A complete program with descriptions of each class is available upon request.

**Instructor:** Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12

Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

### Cloud Invaders: Kites for Kids

**Saturday, June 8**

(one session) Classroom A  
**Section I:** For children of ages 5-7  
11 a.m. to 1 p.m.

**Section II:** For children of ages 8-11  
2 to 4 p.m.

Please indicate your section on the registration form.

Be a sky explorer and create your own kite to fly in the gentlest of breezes. Create a rainbow, dragon, or butterfly to dance with the clouds and soar into the blue. Test flights will be held at the Gardens.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12

### Spices and Sailing Ships

**Saturday, June 22**

(one session) Classroom A

**Section I:** 10 a.m. to noon (This section is filled.)

**Section II:** For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

What do mustard on a hot dog and a cinnamon bear have in common? They are both flavored from spices. Find out how sweet-smelling and spicy mixtures can be made from bark, seeds, flowers, buds, and roots. Learn which evergreen tree is the source of two spices.

Discover how men in the time of castles and kings set out in sailing ships to find a route to the Spice Islands and bumped into the New World instead. Bake a spicy surprise and sample the best in cinnamon bears. Build your own sailing ship and race it on the Gardens' ponds.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 15

### For Children of Ages 5 to 7 and a Parent

#### Pioneers on the Plains

Monday, July 29, Tuesday, July 30, Thursday, August 2, Friday, August 3  
(skip Wednesday, July 31)  
(four sessions) 10 a.m. to noon

This class meets at the Chatfield Arboretum schoolhouse. The Arboretum is located less than  $\frac{1}{2}$  mile to the left on Deer Creek Road just off Highway 75 (County Line Road).

Visit the 1800's one-room schoolhouse at DBG's Chatfield Arboretum and return to a time when pioneers settled the Plains. Children with a parent can join nature hikes and listen to songbirds. Look for a resident family of owls. Walk near the stream's edge and learn to identify creature tracks.

Discover which flowers pioneers planted in their gardens and learn some of their crafts. Dye yarn using plant materials to recreate summer's spectrum. Make your own marble paper and wax candles. Enjoy old-fashioned games and have a peppermint orange treat.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$25 members/\$27.50 non-members (Class fee covers a child and one parent.)

**Limit:** 8 children and 8 parents

©1985  
JoDuranceau Cannon

### Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

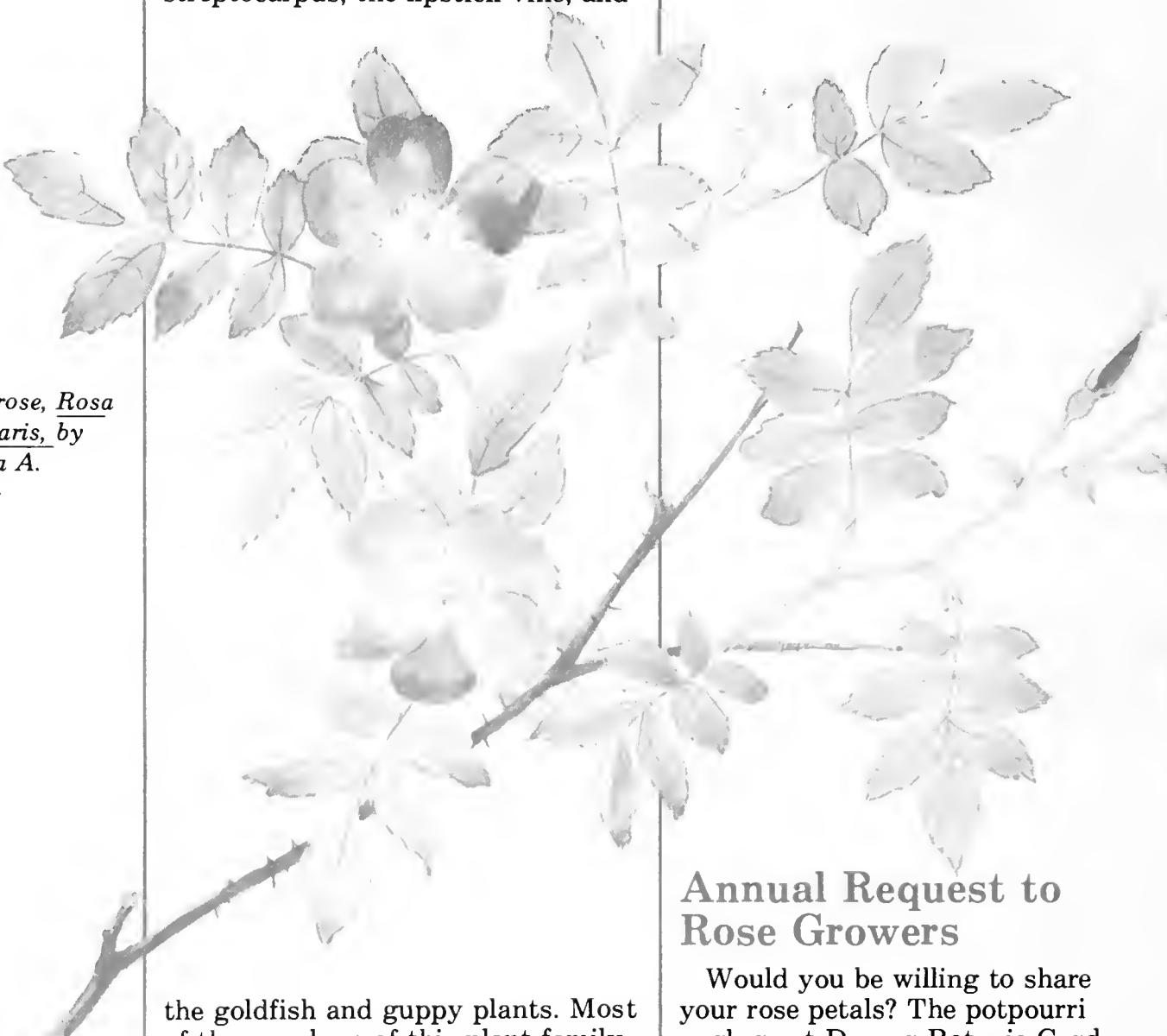
Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

## Gloxinia Gesneriad Growers Show and Sale

Gloxinia Gesneriad Growers present the 1985 show and sale "Gesneriads—The Cat's Meow," in John C. Mitchell II Hall Saturday and Sunday, June 29 and 30. There is no admission charge for this show other than the non-member gate fee.

Gesneriaceae is the plant family which includes such popular house plants as African violets, gloxinias, streptocarpus, the lipstick vine, and



the goldfish and guppy plants. Most of the members of this plant family are easy to grow and flower abundantly in a delightful array of colors and shapes, and they are commonly called gesneriads.

For the novice, as well as the experienced grower, an educational display will be available. Visitors can look forward to receiving free plant cuttings with the hope that more people will discover the fun of growing these captivating plants. Throughout the show members will be available to answer questions.

On Saturday morning, before the show opens to the public, the plants will undergo some critical judging. From 1:00 to 4:30 p.m. Saturday and 10 a.m. to 4:30 p.m. Sunday, visitors can enjoy the prize winners.

Gesneriads are interesting plants and have been "The Cat's Meow" for gardeners for years—visit this show and discover their fascination yourself.

*Wild rose, Rosa acicularis, by Emma A. Ervin.*

## June Meeting of the Denver Rose Society

"Preparing for the Rose Show" is the theme for the June monthly meeting of the Denver Rose Society. Scheduled for Thursday, June 13, at 7:30 p.m. in the Denver Botanic Gardens House, members will learn the guidelines for exhibiting in the Rose Show scheduled for June 23. Linda Brown will lead the panel discussion and guests are welcome to attend.



### Annual Request to Rose Growers

Would you be willing to share your rose petals? The potpourri workers at Denver Botanic Gardens need them to make sachets, tranquility pillows, and to fill small glass vases, all of which are for sale in the DBG Gift Shop. In addition, the potpourri items are popular at the Annual Holiday Gift Shop Sale in November.

Throughout the summer all you need to do is remove the petals from the stems and dry them on newspapers anywhere that is free of moisture. If you have no place to dry them, or need additional information, please call Fran Morrison at 424-0706.

Proceeds from the sale of these projects help to keep your Denver Botanic Gardens beautiful.

## 1985 Annual Rose Show

Exhibition class hybrid teas, grandifloras, and miniatures will be among the many varieties of roses on display in the 38th Annual Rose Show. The Denver Rose Society's show will be held in John C. Mitchell II Hall on Sunday, June 23 from 1 to 4:30 p.m.

This year's theme for the judged competition of the Design Classes will be based on movie titles. Visitors may find their favorite hybrid tea expressing an arranger's interpretation of a favorite movie. Judging will take place in the morning prior to the show's opening.

The public is invited to attend at no charge other than the non-member gate admission fee.

## "Dancing Iris" Colorado Iris Show June 1 and 2

Iris growers of Colorado celebrate the spring season of 1985 with their Annual Iris Show on Saturday, June 1 and Sunday, June 2. This show, titled "Dancing Iris," will be held in John C. Mitchell II Hall from 1 to 4:45 p.m. Saturday and 10 a.m. to 4:45 p.m. Sunday.

Harry Kuesel, vice president of the American Iris Society, Region 20 (the state of Colorado), urges all iris growers to exhibit their beauties and invites everyone who loves iris and other flowers to view the show.

Exhibitors are invited to submit their entries on Saturday morning, June 1, between 7 and 9:30 a.m. An estimated 600 iris specimens (to include more than 400 varieties of iris) will be judged by American Iris Society judges between 9:30 a.m. and 1 p.m. Entries of artistic arrangements featuring iris will also be critiqued by judges accredited by the National Council for State Garden Clubs.

Timing of this show is planned to catch the best of the annual iris parade of color. Visitors to the show are urged to visit the Botanic Gardens' plantings, including the Rock Alpine Garden display of exotic iris species from throughout the northern hemisphere. There is no fee for this show other than the non-member gate admission fee.

## Gardening Tips for June

With an average percentage of possible sunshine for June through September of 72.5 percent, Denver is especially suited for the culture of water lilies. Hardy water lilies (*Castalia*) are treated as perennials and tropical water lilies (*Lotus*, tropical night-blooming water lilies and *Brachyceras*, day-blooming water lilies) as annuals. They are frequently referred to as hardies and tropics respectively.

Tropics require a more careful treatment than the hardies. This effort is more than compensated because tropics are more dynamic, producing spectacular blooms on stout stems that reach heights of 12 inches or more above the water level. In addition, they are heavily scented and continue to bloom well into September, when the hardies begin to enter dormancy. Mid- to late-May for hardies and mid-June for tropics are suggested planting times for the Denver region. Tropics should never be set out when water temperatures fall below 70 degrees.

Polyethylene containers measuring 15 inches in diameter by nine inches deep are suitable for most hardies, while containers of 19 inches in diameter by nine inches deep are best suited for growing tropics. The preferred medium for water lilies is a soil mix of 75 percent topsoil and 25 percent well-rotted cow manure.

Young plants are planted with the crowns extending one inch above the soil line. A one-inch layer of sand or gravel is usually spread over the soil to prevent any clouding of the water. Six to 12 inches of water should cover the tops of the containers. As the leaves of the tropics are especially tender, the plants should never be exposed to direct sunlight when not in the water.

Even though water lilies do surprisingly well without fertilizer, their performance can be enhanced through a program of monthly feedings.

A 5-10-5 analysis or similar garden fertilizer can be added at planting time and then monthly during the growing season. The fertilizer is securely wrapped in newspaper and pushed into the plant containers, being especially careful not to disturb the plants unnecessarily. Slow release fertilizers or bone meal are other alternatives.

Tropics are usually discarded after the growing season, although they can be overwintered in greenhouse situations. Hardies can be left in pools that do not freeze solidly, or removed to cool, protected areas for the winter. It is important that the roots do not freeze and the soil be kept moist. Tropical water lily tubers are overwintered in the greenhouses of Denver Botanic Gardens. After being repotted in late February or early March the tubers sprout new leaves. We are continually trying various ways to overwinter the hardies. In the spring or fall, hardies can be propagated asexually by breaking off and repotting the newly formed tubers.

Water gardening enthusiasts with limited gardening space can find pleasure by displaying plants in tubs or halved whiskey barrels. Dwarf water lilies and water hyacinths (*Eichhornia crassipes*) can be used effectively in half barrels. Other plants suitable for tub culture include duckweed (*Lemna minor*), water lettuce (*Pistia stratiotes*), water poppy (*Hydrocleys nymphoides*), and water snowflake (*Nymphoides indica*).

The following is a suggested and workable maintenance calendar for water lilies.

May 20—Plant and fertilize hardy water lilies using water lily fertilizer as directed or by mixing four ounces of 5-10-5 fertilizer per cubic foot of soil. Divide roots every second year keeping at least four inches of root attached to the crown.

June 15—Plant tropics and fertilize using the same directions as with the hardies.

July to September—Fertilize as needed with special water lily formulas as directed or with 5-10-5 fertilizer at the application rate of four ounces per cubic foot of soil. Be sure to remove yellowing leaves.

October—If your pool is not drained, hardies can be overwintered providing the pool is deep enough for the roots to remain unfrozen. A covering with plywood and an organic mulch (leaves, pine needles, or straw) will give added protection against freezing. If the pool is drained, the hardies should be moved to a cool (not freezing) location and kept moist until spring planting. Tropics are usually discarded unless a greenhouse is available.

For more information on the planting and care of both hardy and tropical water lilies check the Helen Fowler Library where a thorough selection of literature can be found. Be sure to visit our Aquatic Plant Display this summer to enjoy a large variety of tropical and hardy water lilies.

Joseph V. Tomocik  
Gardener Florist II  
at Denver Botanic Gardens

*Yellow pond-lily, Nuphar luteum, by Emma A. Ervin.*



## Aquatic Plant Auction

The public is invited to attend an auction of aquatic plants hosted by the Colorado Water Garden Society on Sunday, June 9 in the courtyard of the Denver Botanic Gardens' House. Viewing of the plants will begin at 1:45 p.m. and bidding will start at 2:15.

A number of tropical water lilies are to be auctioned, as well as some fine hardies. Other water-dwelling plants will be sold to those who write the highest bids in a silent auction to be held simultaneously.

Anyone desiring information about water gardening, the auction, or the Society is welcome to call its president, John Mirgon, from 10 a.m. to 2 p.m. at 922-9559.

# JUN

## Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

# A

# S

# L

# E

# M

# T

# N

# T

# W

# D

# T

# A

# A

# F

# R

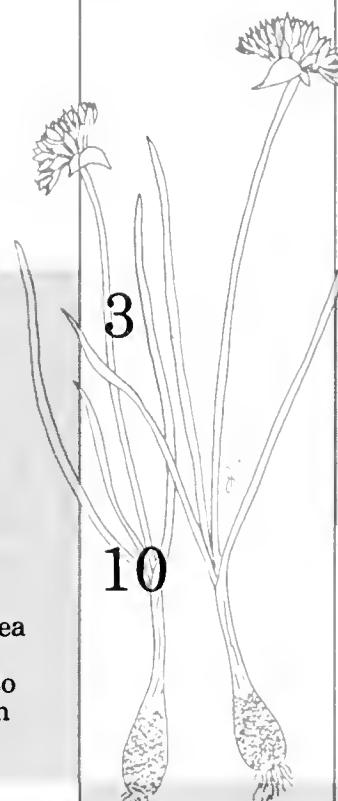
# S

# 1

Container Gardening, Field Trip to Bear Creek Nature Center Iris Show

# 2

Iris Show



# 9

Japanese Tea Ceremony, Field Trip to Roxborough State Park

# 10

Dinosaur Salads Free Day for Denver City/County Residents

# 16

Rose Show

# 17

Peacocks and Pagodas

# 23

**Coming  
Next  
Month**

# 24

July 11 & 12 Cleo Parker-Robinson Dance Ensemble  
July 16 Young Audiences Concert

# E

# T

# W

# N

# T

# W

# D

# T

# A

# A

# F

# R

# D

# T

# A

# A

# F

# R

# A

# F

# R

# A

# F

# R

# A

# F

# R

# A

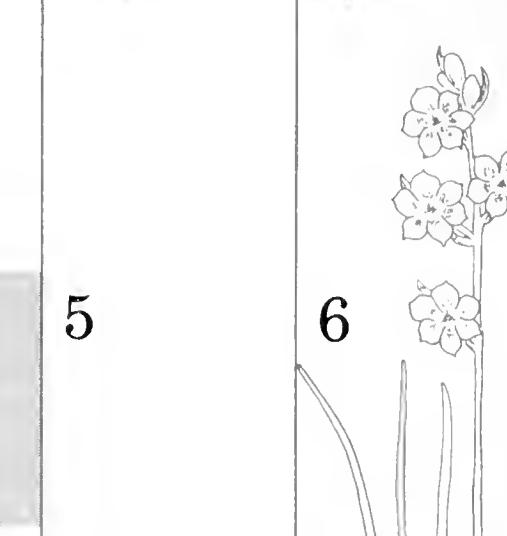
# F

# R

# A

# F

# R



# N

# T

# W

# D

# T

# A

# A

# F

# R

# A

# F

# R

# A

# F

# R

# A

# F

# R

# A

# F

# R

# A

# F

# R

# A

# F

# R

# A

# F

# R

Denver Botanic Gardens, Inc.

909 York Street  
Denver, Colorado 80206  
303-575-3751

**June 1985**

**TIME VALUE**

Address correction requested



Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

N

E

W

S



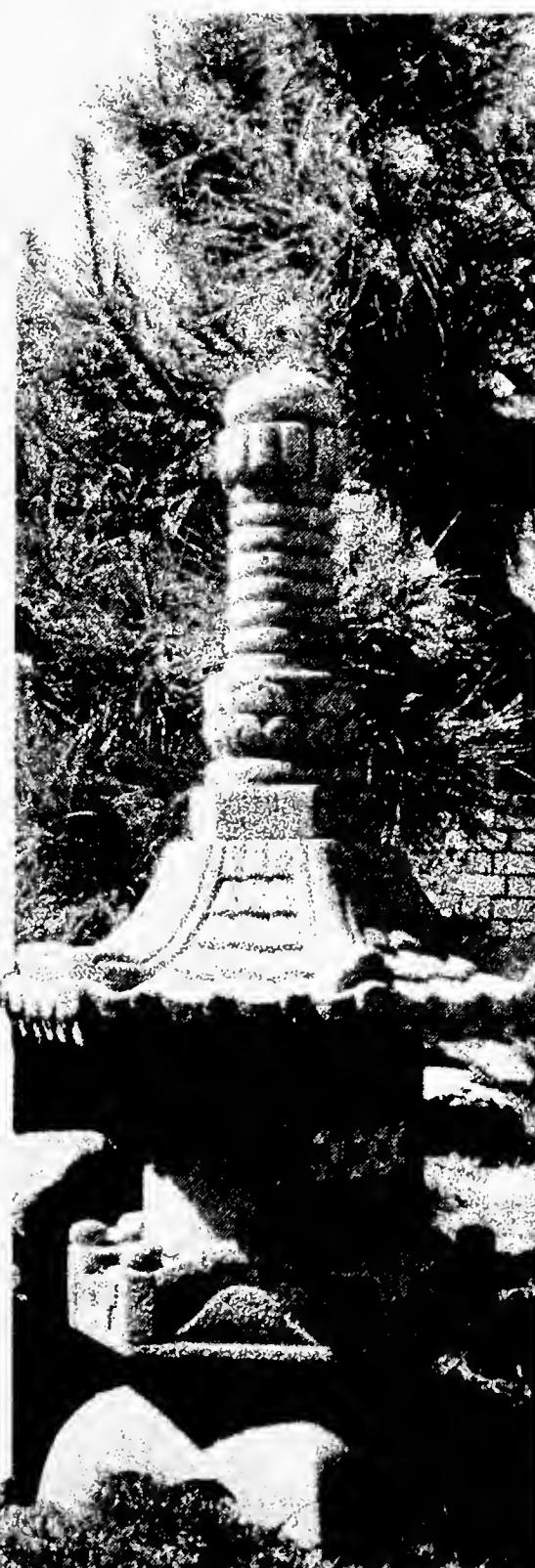
## Annual Terrace and Garden Tour July 20

The Denver Botanic Gardens' 26th Annual Terrace and Garden Tour will be held on Saturday, July 20 from 9:30 a.m. to 5:30 p.m., and presents a delightful opportunity to view the gardens on Sunset Drive in Cherry Hills Village. This year's event features a lovely one-mile walking tour to observe eight home gardens. Shuttle buses will be provided between the homes for those wishing to ride rather than walk.

These magnificent gardens provide an out-of-the-city feeling through a splendid array of greenery—evergreens, ashes, aspens, magnolias, and fruit trees. Displays include many annuals and perennials, along with vegetable, herb, and rock gardens. The unique features of this year's homes, in addition to the fine gardens, are the spacious lawns, attractive outdoor living areas, and unusual swimming pools and hot tubs.

At one home you will see an Oriental garden which complements a serpentine-walled terrace containing a keyhole-shaped swimming pool and guest house.

A two-year-old Concord grape arbor, at another home, is planted for the enjoyment of the plentiful wildlife that lives in the open areas of this neighborhood. Additionally, you can enjoy a small garden of native plants brought down from Fairplay at this same house.



The Denver Botanic Gardens Guild has selected for 1985 the following homes:

Mr. & Mrs. Victor M. Seabrook  
2 Sunset Drive

Mr. & Mrs. Charles L. Biederman  
5 Sunset Drive

Mr. & Mrs. William R. Loeffler  
8 Sunset Drive

Mr. & Mrs. Robert L. Davis III  
13 Sunset Drive

Mr. & Mrs. Al J. Hickerson  
19 Sunset Drive

Mr. & Mrs. Kenneth B. Marsh  
21 Sunset Drive

Mr. & Mrs. Richard E. Block  
27 Sunset Drive

Mr. & Mrs. Frederick R. Mayer  
37 Sunset Drive

Your \$8 tax-deductible ticket may be purchased from any DBG Guild member, through the Gardens' Gift Shop, or at the homes on the day of the tour. A map, parking directions, garden descriptions, and refreshments will be provided for all ticket holders. For further information call Joan Merrick, 935-9090, or D. J. Standish, 237-7650.

*View from the  
garden of Mr.  
and Mrs.  
Robert L.  
Davis III.*

*Inside:*

*Great Getaways*  
page 2

*July Concert*  
*Schedule* page 3

*Asian Festival*  
page 5

*Classes for Adults*  
page 6

*Classes for Kids*  
page 8

Brilliant displays of chrysanthemums and asters, yellow poplars and red oaks, and sweet-smelling apple trees await you this September in the lower Great Lakes region.

It is not too late to sign up for a unique tour opportunity provided by Denver Botanic Gardens. This Great Lakes getaway begins on September 8 and comes to a dramatic conclusion on September 19. Through our many professional contacts we have created what promises to be a memorable tour of some of the premier gardens, estates, houses, and extraordinary collections of art in the lower Great Lakes.

In Cleveland participants will begin to experience the blend of interests provided on this tour. Visit

the world-renowned Cleveland Art Museum as well as the Western Reserve Herb Society Garden and the Garden Center of Greater Cleveland. You can also see the Holden Arboretum, the Gardens of Kingwood Center, and Stan Hywet Hall.

This exciting mixture continues for the remainder of the tour. A touch of history will be felt in Dearborn, Michigan, in Greenfield Village, and the Henry Ford Museum. Here, traditional crafts (basketry, candle-making, and coopering) continue the "good old days" into the 20th Century.

Then we travel to the present and the sophistication of Detroit. The art museums and private gardens here are rivaled by few. After exploring Detroit, we travel to

Chicago and the Chicago Botanic Gardens, Morton Arboretum, Cantigny, and numerous museums.

The tour ends in Chicago, but prior to the conclusion we can enjoy the Milwaukee and Boerner Botanical Gardens. The strikingly modern geodesic domes of Milwaukee Botanical Gardens house tropical plants in one, arid plants in another, and a seasonal display in the third.

As a fitting finale we will dine amid the tanks of the John G. Shedd Aquarium. Call DBG Assistant Director Andrew Pierce at 575-3751 extension 18 or Travel Associates at 759-8666 for additional information or to make your reservations.

## Annual Membership Dinner August 13

August is the month for this year's Annual Membership Dinner. On Tuesday, August 13 members can look forward to a summer soiree more than just a dinner. This year an entertaining evening has been set aside for members and their guests to enjoy the gardens in all of their splendor.

A social hour and stroll begins at 6 p.m. The talented accordionist, Ila Toogood, will roam the gardens performing a wide range of music for all. If you are feeling inquisitive, knowledgeable members will be available at various gardens to answer your questions.

An elegant basket dinner will be served at 7 p.m. in the amphitheater. For those not bringing blankets or not wishing to sit on the ground, there will be a limited number of tables. After dinner enjoy the relaxing sounds of Dale Arthur, formerly of the Mario Singers. He will provide music from opera, Broadway, and popular easy-listening songs.

Reservations for this evening of entertainment must be made by August 9. Tickets are \$15 per person and can be obtained by completing and returning to Denver Botanic Gardens the invitation enclosed in this issue of the *Green Thumb News*.

## July 14 Daylily Show and Sale at DBG

Delightfully dependable daylilies will be on display Sunday, July 14 in John C. Mitchell II Hall. The American Hemerocallis Society will hold their annual Show and Sale from noon until 4:45 p.m.

This show has gained in popularity and will consist of more than 500 judged entries. In conjunction to the show, there will be a sale of daylilies. Society members will also be on hand to answer your questions on culture.

### Tributes

**In honor of Julie Blish & Paul Schluger**  
Anna Absalom

**In honor of Molly Orkild & William S. Larson**

Richard M. & Lois J. Winar

**In memory of Justin Briely**

Mrs. Louise W. Parkinson

**In memory of Jeanette Cohen**

David & Gayle Weinstein

**In memory of Jayme Keta McLean**

Employees of Randall & Blake, Inc.

**In memory of Maurice Pulman**

The Reverend & Mrs. Griffiths

Laura and Katherine Morris

Ms. Lucy Thomson

Mr. & Mrs. C. L. Williams

**In memory of Isabel McIlvaine Steltzner**

Mr. & Mrs. Ormand Birkland, Jr.

Kathleen G. Cannon

Barbara J. Cunningham

Mrs. William M. Davis

Marilyn M. Gower

Mrs. Peter H. Holme, Jr.

Phyllis Stillman

Additional details concerning the show can be obtained by calling either the Show Chairman, Charles Baker at 757-8703, or Co-Chairman, Harry Kuesel at 795-9718.

Daylilies will be found throughout John C. Mitchell II Hall and the outside display gardens. This show has been planned to coincide with the peak of the daylily season. Plan to attend this event and learn more about these delightful plants. Other than the regular gate admission fee for non-members, there will be no charge for this summer show.

### Green Thumb News Number 85—7 July 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than June 20 for August, July 19 for September, and August 20 for October.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



## July Concert Schedule

The 1985 Garden Concert Series presented by Denver Botanic Gardens, KCFR 90.1 FM, United Bank of Cherry Creek, and United Bank of Denver continues through July to September. You can expect to enjoy the following programs this month in DBG's amphitheater:

**Cleo Parker-Robinson Dance Ensemble.** Thursday, July 11, or Friday, July 12 at 7:30 p.m. (rain date—Sunday, July 14 at 10 a.m.) Gates open at 6 p.m. *Tickets on sale starting Friday, June 28.*

**The Colorado Philharmonic.** Thursday, July 25 or Friday, July 26 at 7:30 p.m. (rain date—Sunday, July 28 at 10 a.m.) Gates open at 6 p.m. *Tickets on sale starting Friday, July 12.*

Other musical events include the new series of Young Audiences Concerts. The second of three concerts presented by Denver Botanic Gardens, Young Audiences Inc., and the Coors Foundation, will be held on July 16 in the amphitheater. Featured are:

**Grant Street Dance Company and Toys Percussion.** Tuesday, July 16 at 6:30 p.m. (rain date—Tuesday, July 23 at 6:30 p.m.) Gates open at 6 p.m. *Tickets on sale starting Monday, July 1 at 7 a.m.*

For complete details on fees and where to obtain tickets please refer to the June *Green Thumb News* or call 575-2547 for a recorded message.

## Watercolor Show and Sale July 1-6

The Colorado Watercolor Society's annual show will be held at Denver Botanic Gardens beginning Monday, July 1 and concluding on Saturday July 6 from 10:00 a.m. to 4:30 p.m. daily. Society members will be available each day throughout the sale to discuss techniques and interpretations with visitors.

All of the artwork in this exhibit will be for sale and a portion of the sales will help support the Gardens. Sally Perisho, Director of the Arapahoe Community College Colorado Gallery of Arts, will be the juror for this exhibit.

This colorful show is the perfect time to introduce the Gardens to a friend. There will be no admission charge for the show beyond the non-member gate fee.

## Extended Evening Hours

Throughout the summer until Monday, September 2, DBG visitors may stroll through our display gardens in the quiet coolness of the evening. On Monday, Wednesday, Saturday, and Sunday evenings the Gardens will be open until dusk.

Exceptions are Saturday and Sunday, August 3 and 4, when DBG will be hosting the evening performances of the Asian Festival of Arts and Culture.



1985 Garden Party Chairman Kay Malo (left) with Betty Farmer (center) and new Director of Development Nancy Brittain (right).

## Fourth Annual "Garden Party" Benefit July 19

"Hot Jazz into the Cool Night!"

On Friday evening, July 19, Denver Botanic Gardens hosts its Fourth Annual Garden Party. This benefit for DBG features the highly regarded jazz performer, Betty Farmer, voted by the *Denver Post* readers as "Denver's Most Popular Female Singer" for 1985.

Gates will open at 5:30 p.m. allowing Garden Party guests ample time to enjoy cocktails from a cash bar and stroll through the outdoor gardens during the peak of summer bloom. A gourmet picnic supper will be served at 7 p.m.

Betty Farmer and her back-up band will treat you to an evening of elegant jazz renditions beginning at 8 p.m. Guests are encouraged to bring a blanket and sit on the grass of the Gardens' outdoor amphitheater to enjoy the hot jazz and the cool evening.

Tickets to this event are \$40 per person. They can be obtained by returning the reservation form inserted in the June *Green Thumb News*. Information can be obtained by calling Denver Botanic Gardens Development Office at 355-3456.

This special evening is one you won't want to miss. Please note that reservations must be received no later than Monday, July 15.

## Striving for Balance: the Horticulturist/the Therapist

From July 21 to 25 Denver Botanic Gardens and the Central Rocky Mountain Chapter for Therapy and Rehabilitation through Horticulture will co-sponsor the 13th annual conference for National Council for Therapy and Rehabilitation through Horticulture. "Striving for Balance: the Horticulturist/the Therapist" is the theme of this year's conference which explores this new discipline.

Horticultural therapy has tremendous adaptability. Therapy with flowers and plants can be adjusted to fit every age, illness, or need. In this professional program participants will discuss establishing a horticultural therapy program as well as many other topics involving horticulture and therapy.

The pre-registration fee for the entire program is \$120 and registrants will be charged \$130 after July 1. The student fee is \$90 and a daily fee of \$50 has also been set. For an additional small charge, Colorado State University is offering one college credit hour and

continuing education credit to conference participants.

For further information, please contact Judy Carrier, DBG horticultural therapist, at 575-3751, extension 42.

## Director of Smith College Botanic Garden to Lecture

"The Campus Botanic Garden—A Blend of Academic and Public Horticulture," is a free illustrated program to be provided by Dr. Richard Munson on Wednesday, July 31 at 7 p.m. Dr. Munson is the director of Smith College Botanic Garden in Northampton, Massachusetts, a beautiful 300-acre campus at Smith College which serves as a plant study laboratory for students and a display garden for the public.

There is no charge for the program which is open to guests as well as members. Seating for this event is limited and advance reservations are required. Please contact Education Assistant, Carol Knepp at 575-3751 extension 20, to reserve your seats.



*Dr. Richard H. Munson, Director of Smith College Botanic Garden*

## New Works by Carolyn Crawford

New works of botanical illustrator Carolyn Crawford, whose first exhibit in May 1982, was sponsored by Denver Botanic Gardens, will be featured from July 3 through August 6 at Foothills Art Center. Friends and patrons who have been fortunate to collect her superb colored pencil renderings, and others who cherish expert natural illustration, will want to make the drive to Golden for the occasion.

After her debut in John C. Mitchell II Hall, Ms. Crawford accepted an invitation to mount a one-artist show for San Francisco's Strybing Arboretum in 1983. Two of her works were purchased in 1984 for the permanent collection of the Hunt Institute of Botanical Documentation at Carnegie Mellon University in Pittsburgh. Her portrait of the American persimmon, *Diospyros virginiana*, also resides there, a gift of the artist in memory of Dr. T. Paul Maslin. This work has been loaned for inclusion in this show.

Six other Colorado artists (Ms. Crawford has only recently returned to Denver from Oklahoma City) will share the seven galleries of the Center which is located at 809 15th Street in Golden. Hours are from 9 a.m. to 4 p.m. weekdays and Saturdays, and from 1 to 4 p.m. on Sundays.



*Gentiana sino-ornata* by  
Carolyn Crawford

# Festival of Asian Arts and Culture July 27-August 4

Asian food, entertainment, art, and educational activities will highlight the Third Festival of Asian Arts and Culture held at Denver Botanic Gardens July 27 through August 4.

Sponsored by the Asian Pacific Development Center, DBG, and many of the Asian communities in Denver, the festival offers visitors a unique opportunity to experience the art, dance, traditions, customs, and foods of over ten different cultures.

A special feature of this year's festival will be the exhibition of select pieces from the Denver Art Museum's Asian Art Department. The exhibit, in John C. Mitchell II Hall, will be open to the public throughout the festival's nine-day period.

Beginning on Friday, August 2 and continuing through Sunday, August 4, the festival will include three nights of Asian performing arts.

Friday, August 2. Performing artists from Thailand, Korea, Indonesia, and Japan are scheduled, including Japanese *Koto* instruments and folk songs and a *Taiko* drum performance.

Saturday, August 3. The Cambodia Fine Arts Preservation Group, Bui Thien/Son Ca Vietnamese Traditional Dancers, and the National Dance Troupe of Laos will all perform.

Sunday, August 4. The dances and music of both north and south India as well as the Philippines and China.

Evening entertainment will be held in the outdoor amphitheater of Denver Botanic Gardens from 5:30 to 9:30 p.m. Food from some of Denver's finest Asian restaurants will also be sold during each evening performance.

Tickets for each evening performance are \$4 for adults, \$3 for senior citizens (65 and older), and \$2 for children under 12. They are available from Denver Botanic Gardens Development Office at 909 York Street or from the Asian Pacific Development Center at 1825 York Street, Denver.

A special lecture series will emphasize the unique cultural diversity of Asia and will add a definite scholarly aspect to the festival. Two-hour lectures will be held in John C. Mitchell II Hall from Sunday, July 28 through Thursday, August 1, from 7 to 9 p.m. The schedule includes:

Sunday, July 28, "The Impact of War on Southeast Asia," by Dr. John Whitmore of the University of Michigan and Academy Award winner Dr. Haing S. Ngor.

Monday, July 29, "Individuality Reborn? Literary Freedom in China," by Dr. Howard Goldblatt of San Francisco State University.

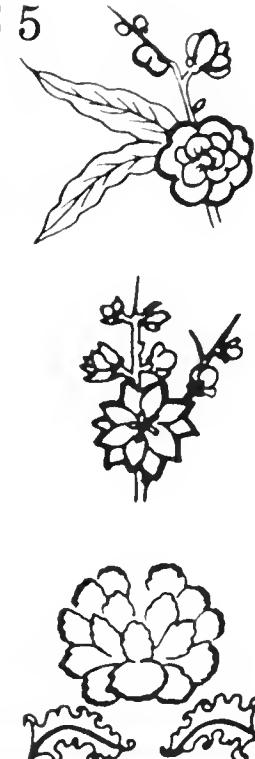
Tuesday, July 30, "Cultural Unity and Diversity in India," by Dr. Yoga Ahuja of Metropolitan State College.

Wednesday, July 31, "Changes in Religion in Asia," by Dr. James Kirk of the University of Denver.

the Asian Pacific Development Center. They are \$50 each for the evening of Sunday, July 28 (dinner and lecture) and \$30 apiece for each of the other evenings (also dinner and lecture). Because tickets are limited, participants are encouraged to reserve their spaces early.

Special educational events include Chinese cooking classes with a healthy approach taught by well-known local nutritionist and author Mary Lee Chin. A course description and fee can be found in the Education section of this newsletter on page 7. On Wednesday, July 31, a Children's Day has been planned from 10 a.m. to 3 p.m. Special

5



Thursday, August 1, "Contemporary Japanese Art History and its Impact on the West," by Professor Donald McCallum of the U.C.L.A. Department of Art.

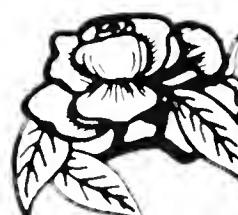
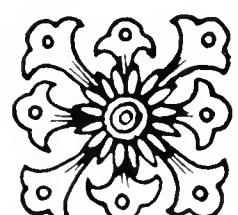
Tickets for each lecture are \$5 except for the Sunday, July 28 program featuring Dr. John Whitmore and Dr. Haing S. Ngor; those tickets are \$15 each. All tickets are available through Denver Botanic Gardens Development Office or the Asian Pacific Development Center.

In addition, a special sit-down catered dinner for forty persons with the featured speaker will be held at DBG's Morrison Horticultural Center prior to each lecture. The Morrison Center will open at 5:15 p.m. and the dinner will last until 6:45 p.m. The speaker(s) and guests will then move to John C. Mitchell II Hall where there will be a reserved seat for each dinner guest. Delicious Asian meals will be featured and tickets are available from DBG Development Office or

Children's Day tours, demonstrations, and workshops are designed to reveal the secrets of the Orient to youngsters.

Young explorers will make their own dragons of unfurling designs and young artist apprentices will learn the skills of the bamboo brush and then capture the play of sunlight in our Japanese Garden. They will print ancient flower and bird symbols and discover their secret meanings and a series of demonstrations of Asian children's games and dances is certain to delight participants.

Preparations are well underway by DBG's "Just for Kids" Instructor Jo Duranceau Cannon and the Education Department staff and parents should note that children must be accompanied by an adult. Pre-registration is not necessary and there is no charge for Children's Day activities other than the standard non-member gate admission fee. In the event of rain, the day's activities will be held indoors.



## Field Trip to Wild Basin, Rocky Mountain National Park

Sunday, July 14  
1 to 4 p.m.

Come and explore Wild Basin, a lovely, unspoiled valley of pristine beauty. The mixed conifer and aspen forest is an excellent habitat to observe many of our summer-blooming wildflowers, including some of the smaller orchids.

**Leader:** Richard Schwendinger

**Meet:** at 1 p.m. at the Wild Basin parking lot. Take Route 7 north out of Allenspark, follow for approximately two miles, and turn left at the Wild Basin sign.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 15

## Field Trip to Second Creek

Tuesday, July 16  
6:30 a.m. to 4 p.m.

This is a moderately strenuous hike to Second Creek, located near Berthoud Pass on U.S. 40. A four-mile round trip distance with a 1200-foot elevation gain will be covered.

This unusually wet high mountain creek area is noted for its lush vegetation and participants can expect to see a profusion of early summer sub-alpine flowers such as Parry's primroses, globeflowers, and marsh marigolds. Above timberline, a fine selection of tundra flowers is anticipated.

Come prepared: Bring sunglasses, sunscreen, rain gear, lunch, and drinking water in a day pack and wear hiking boots.

**Leader:** Bob Heapes is an experienced field trip leader and nature photographer, and is also a naturalist at Roxborough State Park. His congenial leadership makes his trips increasingly popular.

**Meet:** at 6:30 a.m. in the DBG parking lot.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 20

## Field Trip to Wild Basin, Rocky Mountain National Park

Sunday, July 14

1 to 4 p.m.

Come and explore Wild Basin, a lovely, unspoiled valley of pristine beauty. The mixed conifer and aspen forest is an excellent habitat to observe many of our summer-blooming wildflowers, including some of the smaller orchids.

**Leader:** Richard Schwendinger

**Meet:** at 1 p.m. at the Wild Basin parking lot. Take Route 7 north out of Allenspark, follow for approximately two miles, and turn left at the Wild Basin sign.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 15

## Field Trip to Second Creek

Tuesday, July 16  
6:30 a.m. to 4 p.m.

This is a moderately strenuous hike to Second Creek, located near Berthoud Pass on U.S. 40. A four-mile round trip distance with a 1200-foot elevation gain will be covered.

This unusually wet high mountain creek area is noted for its lush vegetation and participants can expect to see a profusion of early summer sub-alpine flowers such as Parry's primroses, globeflowers, and marsh marigolds. Above timberline, a fine selection of tundra flowers is anticipated.

Come prepared: Bring sunglasses, sunscreen, rain gear, lunch, and drinking water in a day pack and wear hiking boots.

**Leader:** Bob Heapes is an experienced field trip leader and nature photographer, and is also a naturalist at Roxborough State Park. His congenial leadership makes his trips increasingly popular.

**Meet:** at 6:30 a.m. in the DBG parking lot.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 20

## Columbine Field Trip

Wednesday, July 17  
9 a.m. to 4 p.m.

Our state flower should be blooming in profusion on this traditional field trip to a site near Bailey.

Located at the edge of the montane zone, habitats visited will include a damp gulch and a ponderosa pine forest.

If the group is lucky, wood lilies may be found. Bring a sack lunch.

**Leader:** Peter Root is an amateur botanist who volunteers regularly at the Kathryn Kalmbach Herbarium at DBG; he is also a volunteer naturalist at Roxborough State Park.

**Meet:** 9 a.m. at the DBG House parking lot to carpool and share gasoline expenses.

**Fee:** \$2 per person



## Field Trip to Mount Goliath

Sunday, July 21  
8 a.m. to 3 p.m.

Tundra wildflowers hold a special fascination for both amateur and professional botanists and Mount Goliath is an exceptional place to observe them. Carpets of dainty wildflowers are complemented with grand mountain vistas and the sculptured, grizzled beauty of bristlecone pines.

Join two experienced field trip leaders and walk the M. Walter Pessman Trail, a winding 1½ mile, downhill path at 12,100 feet. Please bring your lunch and drinking water and dress appropriately.

**Leaders:** Panayoti Kelaidis is curator of the Rock Alpine Garden at DBG and is an enthusiastic and capable field botanist. Bob Heapes, an experienced hiker and nature photographer, is also a naturalist at Roxborough State Park.

**Meet:** at 8 a.m. in the DBG parking lot. Bus transportation will be provided. Please be prompt.

**Fee:** \$12 members/\$13 non-members (includes Janet L. Wingate's brochure, *Alpine Wildflowers of Mount Goliath*, as well as bus transportation).

**Limit:** 45

## Field Trip to Roxborough State Park

Wednesday, July 24  
9 a.m. to noon

Learn spring wildflower identification at this spectacular park. An easy trail winds through striking geologic formations where a wide variety of habitats including sunny, open hillsides, hogback ridges, and a moist stream valley will be explored.

Please come prepared and bring drinking water, a snack, sensible, waterproof walking shoes, and a jacket.

**Leader:** Bob Heapes is an experienced field trip leader and nature photographer, and is also an amateur naturalist at Roxborough State Park. His congenial leadership makes his trips increasingly popular.

**Meet:** at 9 a.m. at the intersection of Roxborough and Rampart Roads. Each car entering the park must purchase a daily user pass in addition to the field trip fee.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 20

## Field Trip to Boreas Pass Near Breckenridge

Saturday, July 27  
1 to 4 p.m.

Boreas Pass was once a major stage route leading from Como in South Park to Breckenridge. Later, the narrow-gauge Denver, South Park, and Pacific Railway was extended over the pass and is now a well-maintained gravel and dirt road on the Breckenridge side. An easy walk will enable you to see both montane and alpine wildflowers and the scenery is spectacular!

**Leader:** Richard Schwendinger

**Meet:** at 1 p.m. in the parking lot of The Silverthorne Inn at Lake Dillon.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 15

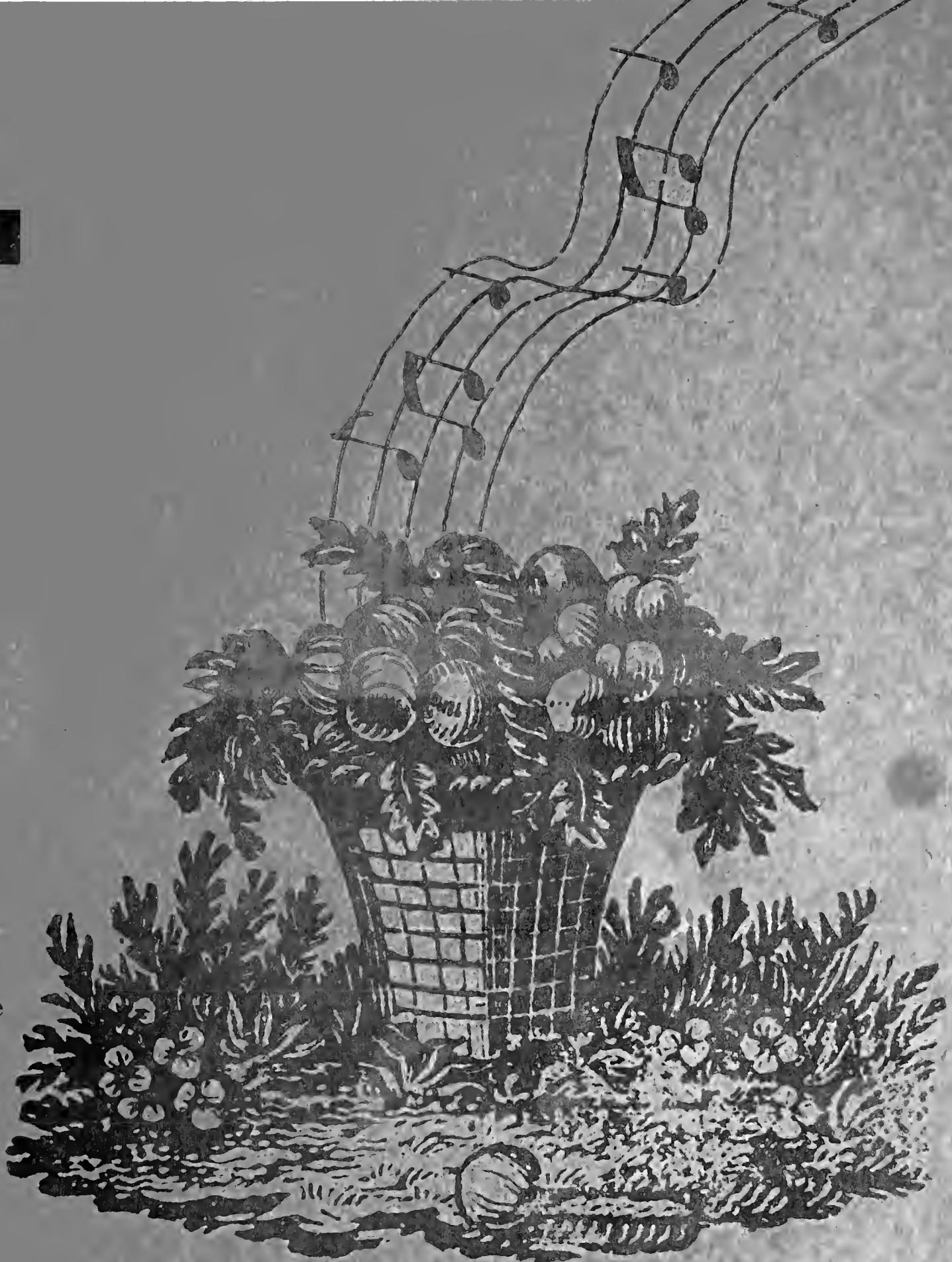
# ANNUAL DINNER

You are invited to  
the Annual Dinner  
for members of  
Denver Botanic Gardens

Tuesday, August 13, 1985  
Outside in the Gardens

Social Hour and Garden  
Stroll: 6 p.m.  
Dinner in a basket with  
"The Arthur Singers" in the  
Amphitheatre: 7 p.m.

\$15.00 per person



*Don't forget a blanket to sit on.  
In case of rain, dinner and  
entertainment will be inside.*

Kindly reserve \_\_\_\_\_  
My check for \$ \_\_\_\_\_

places for me at the Annual Dinner.  
is enclosed (\$15 per person).

Name \_\_\_\_\_

Names of those attending (for name tags): \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

Please return this reservation form together with your check by Friday,  
August 9.

Denver Botanic Gardens (attn: Annual Dinner)  
909 York Street  
Denver, Colorado 80206





## A Chinese Summer Dinner

**Section I:** Wednesday, July 31, from 3 to 6 p.m.  
**Section II:** Saturday, August 3, from 10 a.m. to 1 p.m.  
 (one session) Classroom B  
 Please indicate your section on the registration form.

Learn light, summer Chinese cooking with an emphasis on a cool kitchen and a collected host or hostess. Two registered Chinese dieticians will promote cooking with less fat, salt, sugar, and cholesterol without sacrificing flavor. The featured meal is as appropriate to a summer family repast as it is to an elegant banquet.

Students will prepare Chicken with Peanut Sauce, Cold Vegetable Salad, Fireworks Shrimp, Rice, and Almond Float and Champagne. Please bring a sharp knife and cutting board, an apron, and an appetite since lunch (or dinner) is included!

**Instructors:** Mary Lee Chin, R.D.M.S., learned Chinese cooking at her mother's knee and coordinates it with her work as national spokeswoman for the American Dietetic Association. She has extensive teaching experience and will be assisted by Eleanor Wong, R.D.M.S.

**Fee:** \$20 members/\$22 non-members (includes \$8 for materials)

**Limit:** 18

## The Uses and Folklore of Colorado Wild Plants

**Thursday, August 8**  
**8 a.m. to 3 p.m.**

Did you know that milkweed flowers are delicious when sauteed in butter? Learn how to distinguish poisonous from edible plants in the wild as well as North American Indian uses for them.

Participants will tour DBG's Chatfield Arboretum in the morning and will travel to our Walter S. Reed Botanical Garden near Evergreen for the afternoon.

Please remember your lunch and drinking water, sunscreen, and rain-gear.

**Instructor:** Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

**Meet:** at 8 a.m. in the DBG parking lot to carpool and receive directions.

**Fee:** \$5 members/\$5.50 non-members

**Limit:** 20

## Watercolor and Mixed Media Painting

**Wednesdays, August 14, 21, 28**  
**September 4, 11, 18, 25**  
**October 2**  
 (eight sessions)  
**Classroom B** 9:30 to 11:30 a.m.

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

**Instructor:** Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of University of Colorado at Denver, Metropolitan State College, and



Colorado Women's College. Dr. Ross is a life member of the Arts Students League of New York where she studied under Hans Hofman, Will Barnett, Marion Cooper, and Edgar Whitney.

**Fee:** \$64 members/\$70 non-members

**Limit:** 20

## Natural History at Mount Goliath

**Thursday, August 15**  
**8 a.m. to 3 p.m.**

Learn how pocket gophers shred pincushion plants or how a vole lives in winter amongst the dried asters. What birds feed on bistort and what plant material does the water pipit use for her nest? The identification of alpine plants and their uses by alpine zone residents will be stressed.

Please remember your lunch and drinking water, sunscreen, and rain-gear.

**Instructor:** Tina Jones

**Meet:** at 8 a.m. in the DBG parking lot to carpool and receive directions.

**Fee:** \$5 members/\$5.50 non-members

**Limit:** 20

Colleen Sullivan (left) and Joyce Cronk in our Japanese Garden.

## "Just for Kids" Summer Program

Children can discover some of the many wonders of the plant kingdom in DBG's "Just for Kids" summer program. Interesting hands-on activities abound: watch silkworms eat mulberry leaves and spin cocoons, grind corn for tortillas with Indian rock tools, use yeast to make soda pop and pretzels, and print living fossil plant leaves with sunlight.

Classes meet in the morning from 10 a.m. to noon for 5 to 7 year-olds and in the afternoons from 1 to 3 p.m. for children of ages 8 through 11. Each four-session course meets Monday through Thursday.

Although classes are filling rapidly, spaces still remain in many courses, particularly for older children. Each course is limited to 12 students so parents are encouraged to call Education Assistant Carol Knepp at 575-3751, extension 20, to check availability. The member's fee for each four-session course is \$20 and non-members will be charged \$22.

The complete "Just for Kids" Summer Program was published in the May issue of the *Green Thumb News* and interested persons may request additional copies by calling the Education Department. Please note that pre-registration is necessary.

The remaining summer classes are as follows:

- |           |   |
|-----------|---|
| July 8    | Amazing Maize<br>to 11                          |
| July 15   | Fruit Fizzle Pops<br>to 18                      |
| August 5  | More Good Guys and<br>Bad Guys<br>to 8          |
| August 12 | Dragonflies and the<br>Nymph's Flowers<br>to 15 |
| August 19 | Samurais and Plum<br>Blossoms<br>to 22          |

Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

## The Asian Festival at DBG - Children's Day

Children can fly on the wings of the emperor's dragon and tour the mysterious land of the Orient during the Asian Festival's Children's Day on Wednesday, July 31, from 9 a.m. to 3 p.m.

Special Children's Day tours, demonstrations, and workshops are

designed to reveal the secrets of the Orient to young dragon explorers. There will be no pre-registration or fees for Children's Day activities and complete details are included in the Asian Festival article on page 5.

Seth Green and his scarecrow, "Knight," one of the winners in the Community Garden's Scarecrow Contest.



Children from "Wee Care Children Center" tour the Gardens.

## Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

# L I B R A R Y

## L I N E S

Helen Fowler Library  
Volume 8, No. 3  
July 1985  
Edited by  
Jean Williams

Librarian:  
Solange Gignac

### *The Gardens of Japan*

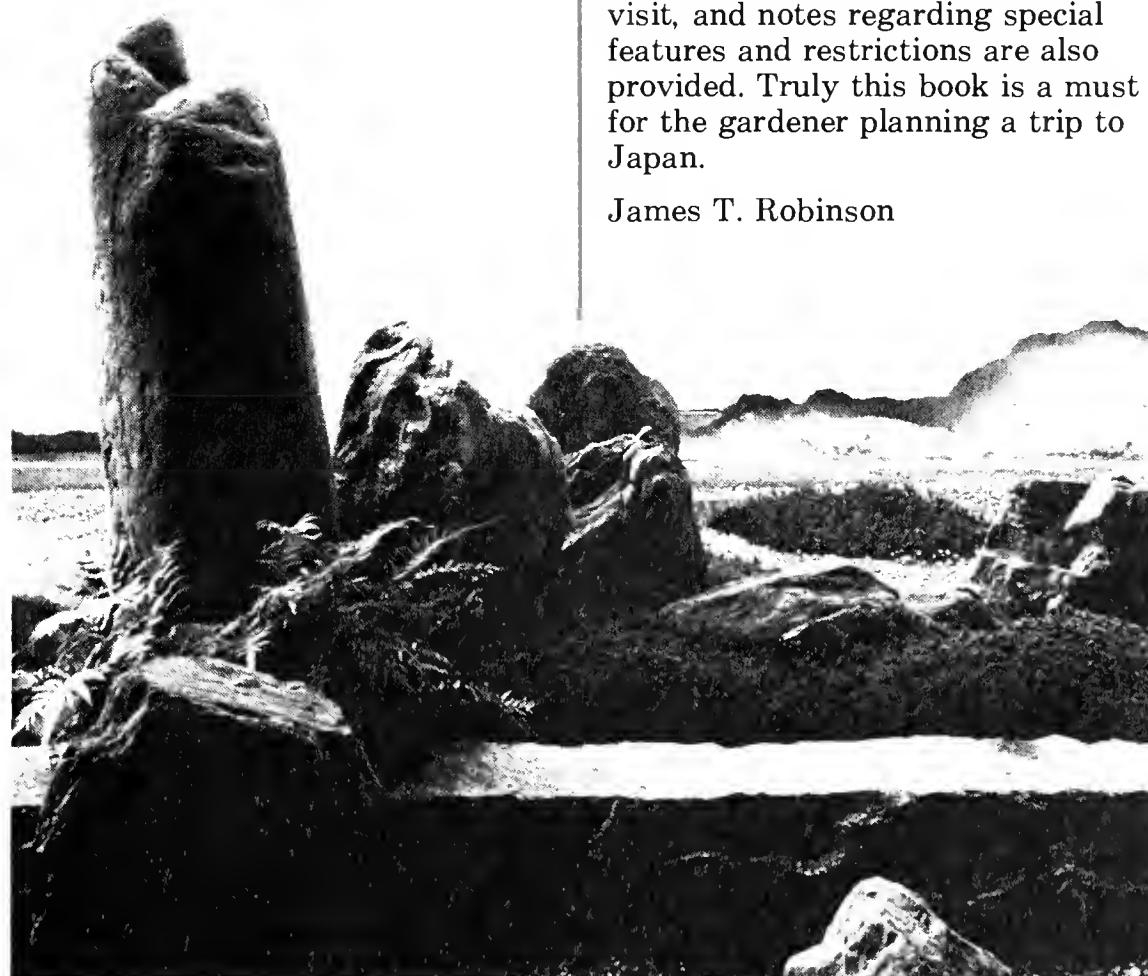
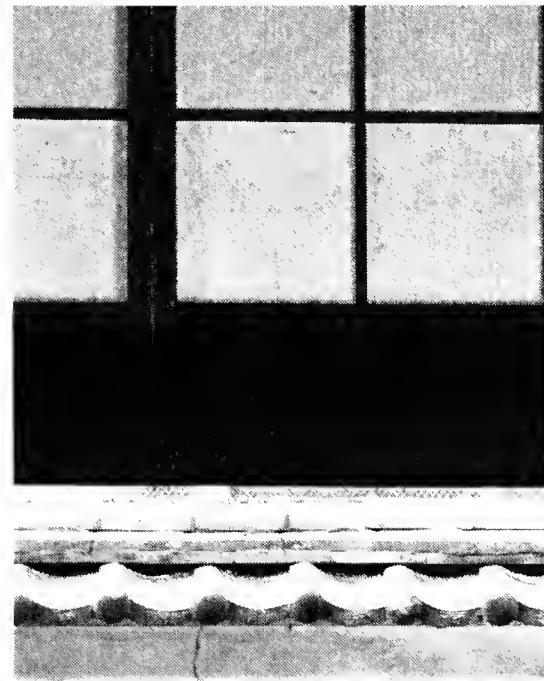
Text by Teiji Itoh. Kodansha International, Tokyo, New York and San Francisco. 1984. \$85.00.  
SB 458 I92Ga 1984.

Gardeners of all persuasions continue to be intrigued with the elegant design of Japanese gardens. A quick scan of this new book, *The Gardens of Japan*, will cause the reader to linger over the superb color photographs, 96 in single- and double-page splendor. This coffee-table size volume will be a delight even if the text is ignored. Few gardeners, however, will be able to pass over the text.

Professor Itoh has written extensively about Japanese gardens, their history and their place in Japanese culture and this volume is the most up-to-date and comprehensive treatment of the subject.

Itoh suggests that the Japanese garden evolved from a series of willful misinterpretations of Chinese models interacting with native Japanese culture. In the eighth and ninth centuries the Japanese began to misinterpret imported garden culture by deliberately or accidentally ignoring the basic philosophical concepts on which it rested.

The book is divided into six sections of color photographs interspersed with eight chapters of text. A full color section is devoted to the famous Moss Temple of Kyoto. Other color sections are titled "Stones, Water, Plants," "Gardens at Work," "The Modern Japanese Garden," "Elements of Design," and "50 Gardens: A Selection."



For those interested in garden design, the photo section, "The Modern Japanese Garden," and the chapter, "The Materials of Creation," provided many insights into both the basic elements of design and how they are expressed in actual gardens. It also provides excellent ideas for the selection of rock, path materials, and fences in creating gardens. Of special interest is the treatment of "borrowed scenery" as an aspect of garden planning.

*The Gardens of Japan* has very useful information for the gardener planning a trip to Japan. The "50 Gardens: A Section," and the chapter that follows present short accounts of 50 famous Japanese gardens. Information and a photo about each garden is presented. Hours, admission fees, best times to visit, and notes regarding special features and restrictions are also provided. Truly this book is a must for the gardener planning a trip to Japan.

James T. Robinson

### THE REVIEWERS

Andrew Pierce—  
Assistant Director at  
DBG

James T. Robinson—  
past president  
of the Denver  
Bonsai Society

William A. Weber, Ph.D.—  
Curator of the  
University of  
Colorado  
Museum

## The Arctic and the Rockies As Seen by a Botanist: Pictorial

By In-Cho Chung. Published by the author, 1251 Towncrest Road, Williamsport, PA 17701, USA. \$35.00. QK 110 C46 1984.



A year or two ago a gentleman with an Oriental name sent me some color slides of lichens from the Northwest Territories for identification. I gave him the identifications as requested. This is a very ordinary occurrence for me and I thought nothing of it until I received a package from Seoul containing this book, compliments of the author. Here is the product of a very fine botanist possessing a profound knowledge, gained from first-hand experience, of the American Arctic and the Rocky Mountains; an artist's sense of photographic composition; a skilled teacher's talent for exposition of the Arctic-Alpine landscape, climate, life-forms, and its flora; a deep love of his subject; and a self-sacrificing attitude toward offering his knowledge and his craft to the public.

It is amazing that in forty years of residence in the Rocky Mountains I never managed to meet Mr. Chung, either in the field or in the herbarium. He must be a shy and self-sufficient botanist indeed. The fly-leaf reads, "In-Cho Chung was born in North Korea in 1918. He attended the University of Tokyo, Seoul National University, and later the University of Michigan where he received his M.S. and Ph.D. respectively. He was assistant curator of the Botany Department of Field Museum of Natural History in

Chicago and taught at Dayton (sic) Beach, Florida, Chicago, and Mansfield, Pennsylvania until 1972 as professor of botany. Dr. Chung has travelled extensively in the United States and Canada, botanizing the Atlantic coast from Florida to Labrador, the Appalachian Mountains from Georgia to Gaspe and Newfoundland, the Arctic from Baffin Island to Alaska, and the Rocky Mountain system from Alaska to Colorado."

Dr. Chung tells me that the book is priced "below cost," a large understatement. It is one of the best values for a pictorial that one can find anywhere. The introductory text (22 pages, of which half consists of plates) is concise but wholly adequate, describing first the two areas topographically, climatically, and geologically, and then discussing the meaning of the necessity of phytogeographical terms: circumpolar, circumboreal, amphi-atlantic, amphi-beringian. The rest of the book is purely pictorial, devoted to chapters on the Canadian Eastern Arctic, the Canadian Western Arctic, the Alaskan Arctic and adjacent areas, the Canadian



Rockies and adjacent areas, and the American Rockies and adjacent areas. A comprehensive scientific bibliography of eleven pages and a subject and species index completes the whole.

The photographs cover land forms including tundra types from the air, limestone deserts, mountain scenery, vegetation types, vascular plants, macrofungi and macrolichens. Every picture is identifiable; close-ups are given to accompany views of whole stands. A few sample captions should suffice to indicate the educational scope of this book: "199. Alpine Harebell (*Campanula lasiocarpa*) in a Dryas—lichen dry meadow, Anaktuvuk Pass, Alaska 07-29-79. The flower is about 3/4 inch (2 cm) long. This is an arctic-alpine species ranging from northern Japan over eastern Siberia to

Alaska and the Yukon, south of British Columbia and Alberta. Although many arctic species are wind-pollinated and some scented flowers (#59, 162) are visited by bumblebees, some showy scentless flowers (#8, 49, 199) are visited by flies." "97. An arctic stream bordered by cottongrass, sedge, and willows (#39, 43), Pond Inlet (72°43' N), northern Baffin Island 07-07-83. 98. Cottongrass tussocks (*Eriophorum vaginatum* subsp. *spissum*, E. *spissum*), Pond Inlet 07-05-83. The scales at the base of the head have broad whitish margins and a darker center. Most of the height of cottongrass tussocks is the result of intense frost heaving. Dwarf heath shrubs (#29, 31, 32) and creeping willows (#34, 39) grow in the furrows between the tussocks as well as upon the tussocks."

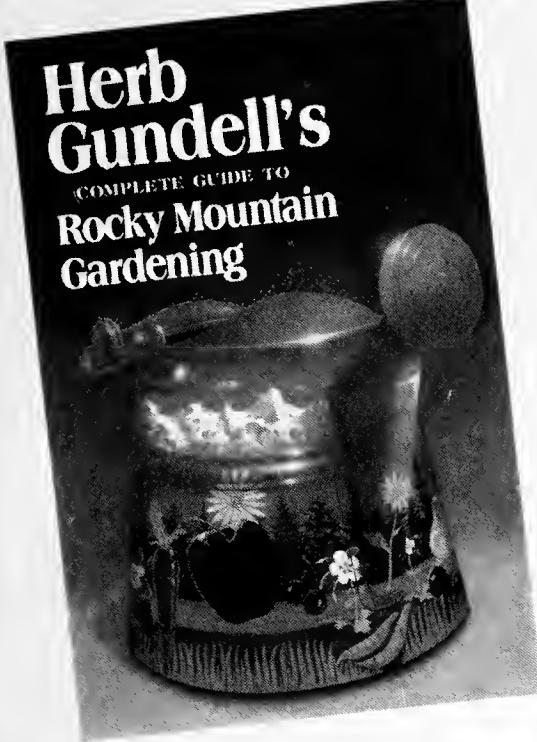
These captions contain several features that are generally not found in picture books: the scrupulously correct identification, useful information correlating the vegetation scene with the species close-up, the place and date of the photo, and cross-indexing of other plates having a bearing on the discussion. The author is to be congratulated on finding a printer to do this magnificent book, which most American presses would consider to be too regional for a wide market, and much too expensive to produce except in huge quantity. The book also benefits from the well-known high quality color reproduction available in Asia. This volume must be a source of great and justified pride to the author, who has created a uniquely educational as well as a stunningly beautiful book in which his great love of the regions and their natural treasures comes through to us on every page.

Run and get this book while you can. It is available from the author, who received 500 copies (the entire run?) from his Korean printer. Its title could well have been "All You Need to Know About Arctic and Alpine Plants, at Bargain Basement Prices." And a special kudos for Professor Chung for his masterful contribution to Arctic-Alpine scientists and laymen.

William A. Weber

# Rocky Mountain Gardening

By Herb Gundell. Dallas: Taylor Publishing Co., 1985. \$24.95. SB 453.2 R63 G85 1984.



For several years gardeners in Colorado have been looking forward to the publication of a comprehensive book explaining our unique local horticultural conditions.

At first glance this book appeared to fill the need as I looked at its extensive table of contents, which covered almost four pages. Individual sections are divided into convenient sub-chapters and they, along with the extensive index tables, enable the reader to find his way easily through the book.

However, disappointment appeared as I delved into the text, especially when the pictures were compared to their captions. Unfortunately, a considerable number (over 20) were incorrectly labeled and to me this was inadmissible. Somewhere a failure of procedure has obviously taken place. Additionally, the quality of reproduction is inadequate among certain tree pictures. A few pictures have no captions to identify their context or nomenclature.

Generally, the content of how-to-garden is dealt with in useful detail and it is obvious that the author has considerable experience when dealing with local conditions. The use of "highlight tips" and column questions help the reader gather essential garden information in a convenient manner.

A few spelling mistakes, e.g. *Lillium* for *Lilium*, *Galanthus rivalis* for *G. nivalis*, Cobhan gold for Cobham gold, do not help the perfectionist nor does dandelion being classified as an annual! Common names are always a problem but schefflera as weeping fig and jade

plant as rubber plant will only confuse the issue further.

I was pleased to see the author use the counsel of Dr. Jack Butler, Colorado State University, Fort Collins, for the chapter on turf. Wouldn't it have been a joy to have the treatment of rock gardens done in a similar manner? This is perhaps the most disappointing section in the book. So many fine and suitable plants have been left out, while some that are potential pernicious weeds in rock garden situations have been recommended.

The abrupt ending to the book (a discussion on African violets) made me wonder if some of the text had been omitted. A closing section of general statements would surely have been welcome to round off this work on Rocky Mountain gardening.

Andrew Pierce

## Gardening Tips for July

Early summer is the time of year when annuals dominate the landscape. Authorities have continued to list, for the past 20 years, the same plants as the most popular in America: petunias, geraniums, marigolds, snapdragons, zinnias, and sweet alyssum. Although these selections do very well for us, there are other plantings that help to arouse our curiosity.

*Lantana* (lantana) has been cultivated for such a long time that the parentage from which they originated has been lost. The garden hybrids are fairly compact and come in a variety of changeable colors ranging from white through yellow to orange, pink, and deep red. Often, the older flowers of each cluster are of a hue different from the newer blossoms. Lantanas prefer full sun and well-drained soil. They are on display near DBG's entrance as a border planting.

*Nicotiana* (flowering tobacco) is a genus belonging to the same family as petunias. An important economic plant, tobacco is also a member of the genus *Nicotiana*. Flowers come in assorted colors ranging from white, green, yellow, pink, to red. Some varieties close in the day and expand at night releasing a heady fragrance. *Nicotiana sylvestris* is five to six feet tall and has large, coarse foliage with white flowers. *N. tabacum*, which is among the easiest to cultivate, is also a tall plant and presents rose-pink to red flowers. A number of these flowering tobaccos will be on display in our annual test garden.

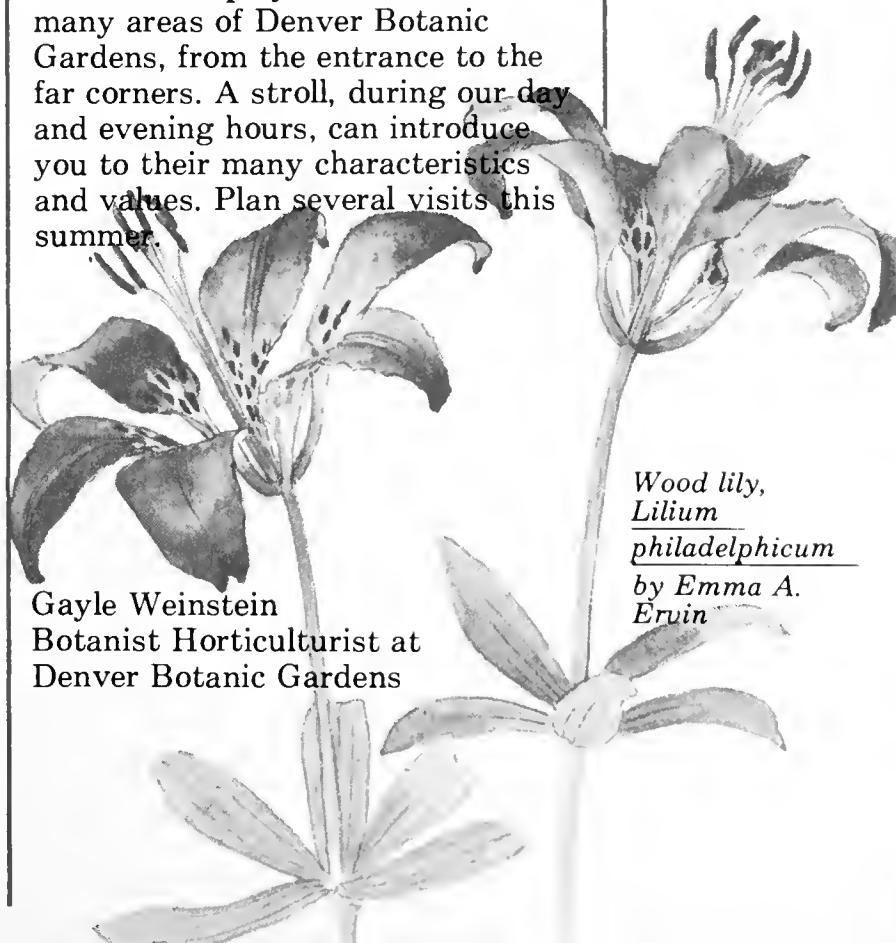
*Pennisetum* (fountain grass) has been used ornamentally in the Denver Parks district for at least 10 years. This unusual grass never ceases to attract attention. It is easy to cultivate and requires very little water once established and beginning to flower. Besides its own ornamental values, it enhances the beauty of many other annuals with which it is combined. A display of *Pennisetum* can be found in the Peony Garden.

*Salvia* (salvia) is well known for its bright red flowers. However, a variety frequently overlooked, except by the Denver Parks and Denver Botanic Gardens, is Blue salvia, *S. farinacea* 'Victoria' or *S. f.* 'Blue Bedder.' Native to Texas, salvia is grown in Denver as an annual. About two to three feet in height, it has slender flower stalks up to nine inches long of Wedgewood blue. These are on display in the Cutting Garden.

*Tithonia* (Mexican sunflower) is native to Mexico and a good drought-tolerant annual that can grow up to five to six feet by September. The foliage is a coarse deep green that provides a good screen. A selection of the shorter species is on display in the annual trial garden.

In addition to the groups of annuals mentioned, many others are being tried for their ornamental value. Some of the characteristics used to select varieties for ornamental display are water and soil requirements, disease and insect susceptibility, length of bloom, and aesthetic values.

Annual displays can be found in many areas of Denver Botanic Gardens, from the entrance to the far corners. A stroll, during our day and evening hours, can introduce you to their many characteristics and values. Plan several visits this summer.



Gayle Weinstein  
Botanist Horticulturist at  
Denver Botanic Gardens

Wood lily,  
*Lilium philadelphicum*  
by Emma A. Ervin

C

A

L

E

N

D

A

R



S

M

T

W

T

F

S

7

8

9

10

11

12

13

Regular Meetings  
of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

## Coming Next Month

August 3  
A Chinese Summer Dinner

Colorado Wild Plants, The Boulder Basoon Band

August 15  
Natural History at Mount Goliath

August 20  
Young Audiences Concert

August 23  
Hot Rize

August 8  
The Uses and Folklore of Col-

orado

August 13  
Members' Annual Dinner

August 18  
Hot Rize

Denver Botanic Gardens, Inc.  
909 York Street  
Denver, Colorado 80206  
303-575-3751

Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

July 1985

TIME VALUE

Address correction requested



# Green

# Thumb

# N E

Denver Botanic Gardens

August 1985

Number 85-8



# W

# S



## Concerts at the Gardens Continue Into September

Concerts in Denver Botanic Gardens continue through August and into September. The 1985 Garden Concert Series, presented by Denver Botanic Gardens, KCFR 90.1 FM, United Bank of Cherry Creek, and the United Bank of Denver is as follows:

**Boulder Bassoon Band.** Thursday, August 8 at 7:30 p.m. (rain date—Sunday, August 11 at 10 a.m.) Gate opens at 6 p.m.  
*Tickets on sale starting Friday, July 26.*

Under the direction of Bill Douglas, the Boulder Bassoon Band plays a wide range of music, from 14th century mass movements to jazz ballads, funky dance tunes, and many of Douglas' own compositions.

**Hot Rize.** Thursday, August 22 or Friday, August 23 at 6:30 p.m. (rain date—Sunday, August 25 at 10 a.m.) Gate opens at 5:30 p.m.  
*Tickets on sale starting Friday, August 9.*

Formed in 1978, Hot Rize has gained an enthusiastic following, performing at bluegrass festivals, concerts, and clubs in more than 35 states, Canada, and Europe.

**Colorado Wind Ensemble.** Thursday, September 5 at 6:30 p.m. (rain date—Sunday, September 8 at 10 a.m.) Gate opens at 5:30 p.m.  
*Tickets on sale starting Friday, August 23.*

The 1985 Garden Concert Series concludes with the state's only fully professional wind ensemble. This 40-member group, led by Martha E. Cox, will entertain listeners with

*continued on page 2*

**Inside:**

*Classes for Adults  
page 5*



Diane Ipsen  
(right),  
volunteer  
guide, with a  
group from  
Children's  
World.

## 1985 Members' Plant Giveaway

Our Annual Members' Plant Giveaway, September 6-7, features some very interesting plants, some of which are relatively uncommon in Denver. The European beech tree (*Fagus sylvatica*), a hardy rubber tree (*Eucalyptus umbraculifera*), and *Zelkova serrata*, a replacement for the elm tree, are among the trees available. Although rare in Denver, these trees can be found growing in special gardens at DBG. Included in the collection of smaller-growing plants are selections of some of the harder-to-find plants that grow in our Rock Alpine Garden.

For house plant enthusiasts, different varieties of ivy may be just right for your hanging planters, or perhaps you have a spot on your windowsill for a variegated sanseveria called 'Bantel's Sensation.' This plant is not readily found on the market nor is another basket plant, *Mitrostigma axillare*, a highly scented flowering plant. Also available for your baskets is a subtropical gesneriad with a long flowering season, *Aeschynanthus*, a member of the African violet family.

More information will be provided on this year's Annual Members' Plant Giveaway in the September *Green Thumb News*.

## Tributes

- In honor of Mrs. John Currey  
Civic Garden Club of Denver
- In honor of Edwin Kornfeld  
Leba & Bernie Munishor
- In honor of Molly & William S. Larson  
Eugene & Marilyn Anderson  
Don & JaNelle Erickson  
Sherman & Colleen Marsh  
Leonard & Nadine Overholt  
Sara L. Rathburn
- In honor of Carol (Mrs. Paul) Locklin  
Mr. & Mrs. Louis Hexter
- In memory of Joseph L. Barber  
Colorado Watercolor Society
- In memory of Mrs. Pauline Bayens  
Mr. & Mrs. Robert S. Gast, Jr.
- In memory of Mrs. Jeanette Cohen  
Ada Gorman
- In memory of Helen Cross  
Millicent M. Grant  
Mildred McAndries  
Ann E. Sherman
- In memory of Mrs. Merriss H. Morlan  
Mrs. Harold E. Parkinson
- In memory of Verie K. (Peg) Mendelsohn  
Mrs. Ethel S. Borgeson
- In memory of Helen I. Rolens  
Dorothy M. Eastlund
- In memory of Alyssa Catherine Route  
Charles & Maxine Barry  
Tom & Gail Bezdek  
Maria & Brian Cunningham  
Gary & Maureen Reeves  
Susan Route
- In memory of Mrs. Stella Severs  
Mr. & Mrs. Robert S. Gast, Jr.
- In memory of Isabel McIlvaine Steltzner  
Mr. & Mrs. Field Benton  
Mrs. Eddy D. Crapsey
- In memory of Jack Wallace  
Ada Gorman

## Concerts at the Gardens (cont.)

compositions by such well-known composers as Holst, Beethoven, and Dvorak.

Other very popular musical events include the new series of Young Audiences Concerts presented by Denver Botanic Gardens, Young Audiences Inc., and the Coors Foundation. The final concert will be held in the amphitheater on August 20. Parents will enjoy these concerts as much as their younger family members. Featured are:

**Jazz Games and Salsa.** Tuesday, August 20 at 6:30 p.m. (rain date—Tuesday, August 27 at 6:30 p.m.) Gate opens at 6 p.m. *Tickets on sale starting Thursday, August 1 at 7 a.m.*

Jazz Games is a quartet of contemporary jazz musicians who will introduce children to the concept of jazz as an American art form. Salsa, also a quartet, uses the Latin rhythms and instruments as guides for a tour of musical aspects of our neighbors in Latin America. Both groups will have all children involved through clapping, dancing, and singing.

For complete details on fees and where to obtain tickets, please refer to the June *Green Thumb News* or call 575-2547 for a recorded message.

## Green Thumb News Number 85-8 August 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than July 19 for September, August 20 for October, and September 20 for November.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



1985 Interns (back row-left to right) Jamie English, Colleen Strain, Kent Patton, Dorothy Dron-Smith, Richard Hickey, Jennifer Lorang, and Elaine Jurries; (front row) Dora Phillips, Becky Thayer, and Alice Roszczewski.

## 1985 Summer College Interns

A warm welcome is being extended to the ten college interns who began work at Denver Botanic Gardens on Monday, June 10. They will remain with us until August 16.

As biology and plant science students, they have the opportunity for ten weeks this summer to work side-by-side with our professional staff and volunteers in a work-learning program. They will be fully introduced to the daily operations of a public display garden. This includes planting, pruning, weeding, and watering the outside grounds; seeding, transplanting, and propagating in the greenhouses, and maintaining the plant displays in the Lobby Court and Conservatory. This year, in addition to working in the Library and Education Department, they can learn about the Com-

munity Gardens and the Horticultural Therapy program.

Enthusiastic participants in this summer's program include: Dorothy Dron-Smith (Colorado State University), Jamie English (Colorado College), Richard Hickey (University of Colorado), Elaine Jurries (Colorado State University), Jennifer Lorang (Saint Mary's College, Winona, Minnesota), Kent Patton (Colorado College), Dora Lee Phillips (University of Nebraska), Alice Roszczewski (University of Colorado), Colleen Strain (University of Wyoming), and Becky Thayer (Western New Mexico University).

A valuable exchange of horticultural and botanical information occurs between the students and staff through our intern program. Please join us in welcoming them.

## Members' Annual Dinner August 13

A summer soiree, a special evening for DBG Members, will take place on Tuesday, August 13. The evening light and cooler temperatures will help transform the Gardens into an elegant wonderland.

The evening of entertainment begins with a social hour and stroll at 6 p.m. A wide range of music will be provided by accordionist Ila Toogood. Expect to find members at a variety of gardens answering your questions and cash bars throughout the grounds to provide refreshments.

At 7 p.m. an elegant basket dinner will be served for outdoor dining in the amphitheater. Bring blankets and sit on the grass with other members and extend the social "hour" throughout the evening.

After dinner enjoy the melodious sounds of the "Arthur Singers." This popular group has performed for several years at the Keystone Octoberfest, at many major hotels in Denver, and the Broadmoor Hotel in Colorado Springs. Their repertoire covers a wide range of musical selections including Broadway show melodies, popular tunes, operetta, and opera. Many of the members were of the former "Mario Singers."

Reservations must be made by August 9. Tickets are \$15 per person and can be obtained by completing and returning to Denver Botanic Gardens the invitation enclosed in the July issue of the *Green Thumb News* or you may call 575-3751.



*Intern Richard Hickey working in the Plains Garden.*

## Rose Petal Donations Sought

Potpourri workers at Denver Botanic Gardens need your rose petals to make sachets, tranquility pillows, and to fill small glass vases sold at the Annual Holiday Gift Shop Sale in November and in the DBG Gift Shop.

The process is simple: all you need to do is remove the petals from the stems and dry them on newspapers.

Ruth McKinney, 777-8723, has kindly offered to provide information on drying your rose petals. Call her if you have questions or if you just need a place to dry them.



## Mushroom Fair August 18

Poisoning by wild mushrooms was reported several hundred times in Colorado last year, and the total number of such cases may actually be in the thousands. To help Coloradans learn about wild mushrooms and avoid poisonings, the Colorado Mycological Society will hold a Mushroom Fair at Denver Botanic Gardens from 11 a.m. to 5 p.m. on Sunday, August 18 in John C. Mitchell II Hall.

The public is invited to view the several hundred wild mushrooms on display at the Fair, and to bring any mushrooms they have found for identification by Dr. Harry Thiers, a world authority on mushrooms, as well as the author of several popular books on wild mushroom identification. The Mushroom Fair is free and open to the public upon entry to Denver Botanic Gardens.



*Brother and sister, Evan and Karen Hayko, discover the splendor of a summer afternoon at DBG.*

## News from the Helen Fowler Library

Thank you for your generous support of the Helen Fowler Library Used Book Sale. The sale netted \$10,269, all of which will be used for the purchase of books. The Library is currently accepting books for next year's sale.

Beginning on August 7, the library will be open on Wednesday evenings until dusk instead of Monday evenings.

## Glass at the Gardens August 22-25

Try a look at the world through rose-colored glass (and lots of other colors too) at this year's Glass at the Gardens show opening Thursday, August 22 at Denver Botanic Gardens' John C. Mitchell II Hall. This sixth annual juried show promises an exposition of superior glass work from throughout the Rocky Mountain region. The exhibit and accompanying sale will be open to the public from 9 a.m. to 4:45 p.m. for four days ending August 25.

The exhibit is sponsored by the Glass Artists Fellowship, and participants will compete for a \$1,000 grand prize, as well as several other awards including People's Choice. Cash and merchandise awards are donated by members of the glass industry and all entries will be judged.

Admission to the glass extravaganza is free to Denver Botanic Gardens members and a gate fee is charged for non-members.

## Community Events Committee Participates in 1985 PGA Championship

The Denver Botanic Gardens Community Events Committee, chaired by Mrs. Rollin D. Barnard, with the participation of the 1985 PGA Championship Golf Tournament and Cherry Hills Country Club, will offer events to visitors of the PGA and will provide floral displays for the pleasure of visitors and local attendees alike.

DBG Botanist Horticulturist Gayle Weinstein and Gardener Florist II Bill O'Hare designed and planted an entry border at Cherry Hills Country Club, site of the 1985 PGA. Estimates are that up to 125,000 people will attend the tournament during the week of August 5-11.

In addition, a luncheon, followed by a guided tour of the Gardens, will be hosted by the PGA at Denver Botanic Gardens for wives of the players and other guests. The PGA chose pieces of our *Fete des Fleurs* earthenware, designed by Tiffany & Co., as a remembrance of their visit to Denver.

The Community Events Committee takes pleasure with their involvement in this prominent community event and extends its appreciation to Mr. Ronald L. Moore, general chairman of the tournament, for his cooperation in making their participation possible.

For further information, please call the PGA office at 781-1985.

*Rose petals being prepared for potpourri by volunteer Mary Gaunt.*

## Education Department

### Watercolor and Mixed Media Painting

Wednesdays, August 14, 21, 28  
September 4, 11, 18, 25  
October 2

(eight sessions)

Classroom B 9:30 to 11:30 a.m.

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

**Instructor:** Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of University of Colorado at Denver, Metropolitan State College, and Colorado Women's College. Dr. Ross is a life member of the Arts Students League of New York where she studied under Hans Hofman, Will Barnett, Marion Cooper, and Edgar Whitney.

**Fee:** \$64 members/\$70 non-members

**Limit:** 20



Volunteer Lainie Jackson enjoys working in the Perennial Border.

### Japanese Tea Ceremony

Section XII: Sunday, August 4  
Section XIII: Saturday, August 17  
Section XIV: Sunday, August 18  
Section XV: Saturday, August 31  
(one session) 2 to 3 p.m.  
Tea House in DBG's Japanese Garden

Please indicate your section on the registration form.

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility, and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

**Instructor:** Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan. She will be assisted by William Crowder who studied the Tea Ceremony in Japan at Ura Senke.

**Fee:** \$4.50 members/\$5 non-members

**Limit:** 15

### A Chinese Summer Dinner

Section II: Saturday, August 3,  
from 10 a.m. to 1 p.m.  
(one session) Classroom B

Learn light, summer Chinese cooking with an emphasis on a cool kitchen and a collected host or hostess. Two registered Chinese dieticians will promote cooking with less fat, salt, sugar, and cholesterol without sacrificing flavor. The featured meal is as appropriate to a summer family repast as it is to an elegant banquet.

Students will prepare Chicken with Peanut Sauce, Cold Vegetable Salad, Fireworks Shrimp, Rice, and Almond Float and Champagne. Please bring a sharp knife and cutting board, an apron, and an appetite since lunch is included!

**Instructors:** Mary Lee Chin, R.D.M.S., learned Chinese cooking at her mother's knee and coordinates it with her work as national spokeswoman for the American Dietetic Association. She has extensive teaching experience and will be assisted by Eleanor Wong, R.D.M.S.

**Fee:** \$20 members/\$22 non-members (includes \$8 for materials)

**Limit:** 18

### Dry It. You'll Like It.

Monday, August 19 and Friday,  
August 23  
(two sessions)  
Classroom B 9:30 to 11:30 a.m.

Dahlias, zinnias, roses, and black-eyed Susans are among the flowers whose beauty you will learn to preserve in silica gel in this class. Students will select and dry garden and roadside flowers for use in winter arrangements.

Please bring two plastic shoe boxes with lids, a small plastic bucket with a handle, scissors, clippers, wire cutters, and an empty three-pound coffee can with lid. All other materials, including flowers, will be provided.

**Instructor:** Avalonne Kosanke is a master flower show judge for the National Council of State Garden Clubs with over 25 years of teaching experience.

**Fee:** \$26 members/\$28 non-members (includes a \$10 materials fee).

**Limit:** 20

**CLASSES**  
**Summer**  
**1985**  
**Denver Botanic Gardens**



## The Uses and Folklore of Colorado Wild Plants

**Thursday, August 8**  
8 a.m. to 3 p.m.

Did you know that milkweed flowers are delicious when sauteed in butter? Learn how to distinguish poisonous from edible plants in the wild as well as North American Indian uses for them.

Participants will tour DBG's Chatfield Arboretum in the morning and will travel to our Walter S. Reed Botanical Garden near Evergreen for the afternoon.

Please remember your lunch and drinking water, sunscreen, and rain-gear.

**Instructor:** Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

**Meet:** at 8 a.m. in the DBG parking lot to carpool and receive directions.

**Fee:** \$5 members/\$5.50 non-members

**Limit:** 20

## Natural History at Mount Goliath

**Thursday, August 15**  
8 a.m. to 3 p.m.

Learn how pocket gophers shred pincushion plants or how a vole lives in winter amongst the dried asters. What birds feed on bistort and what plant material does the water pipit use for her nest? The identification of alpine plants and their uses by alpine zone residents will be stressed.

Please remember your lunch and drinking water, sunscreen, and rain-gear.

**Meet:** at 8 a.m. in the DBG parking lot to carpool and receive directions.

**Fee:** \$5 members/\$5.50 non-members

**Limit:** 20 **Instructor:** Tina Jones

**Denver Botanic Gardens**  
909 York Street  
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list on the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

## Gentian Foray at South Park

**Saturday, August 17**  
9 a.m. to 4 p.m.

The Jefferson/South Park area is a spectacular location to observe some of the late summer wildflowers such as gentians. A profusion of other late bloomers is expected at this 9,000-10,000 foot altitude. Bring drinking water and a lunch.

**Leader:** Richard Schwendinger has been leading field trips throughout North America and Alaska for over 25 years.

**Meet:** at 9 a.m. at DBG House to carpool and receive directions.

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 15

## Plant Life Field Trip: Reynold's Pond Park

**Wednesday, August 21**  
9 a.m. to 4 p.m.

Come and enjoy the profusion of late summer wildflowers in one of Jefferson County's most interesting and varied Open Space Parks. The park is a short distance south of Conifer in a ponderosa pine forest. Participants can expect to see harebells, golden asters, pink bergamot, fireweed, tassel flowers, and owl's clover.

Please bring a lunch and drinking water.

**Leader:** Mary Edwards is an enthusiastic botanist who volunteers in the Kathryn Kalmbach Herbarium at DBG.

**Meet:** at 9 a.m. at Denver Botanic Gardens House to carpool and share gasoline expenses.

**Fee:** \$2 per person

**Limit:** 20



*Gentianopsis  
barbellata* by  
Emma A.  
Ervin

## Grass Walk at Chatfield Arboretum

**Wednesday, August 28**  
10 a.m. to noon

Grasses are often considered a difficult group, but once one understands their basic floral structure, this plant family becomes comprehensible and fascinating. The 350-acre tract of DBG's developing Chatfield Arboretum is a perfect place to learn to identify this major plant group, using a regular dichotomous key.

**Leader:** Janet L. Wingate, M.S. and Ph.D. in botany from the University of Oklahoma, is currently on the DBG staff working in the Kathryn Kalmbach Herbarium.

**Meet:** at 10 a.m. at Chatfield Arboretum which is located less than ½ mile to the west on Deer Creek Road just off Highway 75 (County Line Road).

**Fee:** \$2.50 members/\$3 non-members

**Limit:** 15

Participants are welcome to bring a sack lunch to enjoy at the picnic area afterward.

## Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

## Gardening Tips for August

Seed selection, soil preparation, planting, watering, weeding—all of your loving and time-consuming efforts with your vegetable garden can easily be wasted by improper harvesting. Unfortunately, the fact that you've raised it yourself doesn't guarantee superior results. Knowing the tastiest stages of your crops is critical to maximizing their flavor. And even if you don't garden, these same basic principles are certain to help you select fresher, better produce at the supermarket.

Edible flowers, broccoli and cauliflower, should be harvested when the buds are tight and compact. Merely waiting for the heads to increase in size often causes bitterness to set in; it's far better to sacrifice a little quantity and harvest before the heads develop too fully. Broccoli, unlike cauliflower, will continue to produce smaller shoots all summer long, after the central head is removed.

Green beans are easily grown and are at their tender best when the pods swell with the outline of the developing seeds inside. Be sure to pick all of the maturing beans since yield is reduced by allowing pods to ripen seeds. If green beans do not snap sharply when broken in two, they are tough and overmature and certain to taste starchy.

Highly nutritious Swiss chard is less particular about its harvest time. Its leafy blades are delicious as a salad green and the stems (petioles, actually) can be blanched or steamed and served like asparagus.

Although commercially raised carrots are far more uniformly shaped and sized, a special sweetness accompanies those fresh from the home garden. Avoid one large late season crop and harvest often throughout the summer.

You may not realize that the leafy tops of red beets are just as edible as the roots. Both are delicious, especially when young. When root crops such as beets and carrots age, they tend to become tough and woody so harvest successively throughout the summer. Make salads from the leaves or chop coarsely and cook like spinach. To avoid excess "bleeding," avoid peeling beets until after cooking—leave a bit of the stem on their roots, cook, and the peels will slip off easily later. Buttered baby beets are infinitely superior to the canned variety and a bit of tarragon will further enhance them.

Like beans, cucumbers should be "picked clean" since fruit left to mature on the plants will drastically reduce the formation of new flowers and the subsequent production of more fruits. Cucumbers become bitter and the skins toughen considerably with age so pick them often.

The supreme pleasure of many vegetable gardeners is simply the harvesting of a ripe tomato. That still warm tang of a just picked fruit is the ultimate reward for one's gardening efforts. Harvest them when the fruits are brightly colored and store at room temperature to bring out the fullest flavor. Incidentally, the taste of store-bought tomatoes can be improved considerably by storing them in an open bowl or basket at room temperature for a few days before using.

Help avoid the late-summer over-bounty of your zucchini crop by learning to harvest them while young. Tiny zucchini of up to about five inches long are delicious when halved lengthwise and sauteed briefly in a bit of oil and butter to which some chopped herbs such as marjoram or chives are added just before serving.

The vegetable display area at Denver Botanic Gardens as well as the test areas of the Community Gardens contain a wide array of vegetable crops, including many new varieties especially chosen to suit this climate. A walk through these gardens will acquaint you with some less familiar vegetables such as kohlrabi and kale, as well as whet your appetite.

Patricia A. Pachuta  
Education Director at  
Denver Botanic Gardens

Jimmie Richards harvesting fresh produce from her plot in DBG's Community Gardens.



C

A

L

E

N

D

A

R

# AUGUST

Regular Meetings  
of Plant Societies

*A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.*

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

S

M

T

W

T

F

S

4

July 27-  
August 4  
Asian Festival

Japanese Tea  
Ceremony

11

Mushroom  
Fair, Japanese  
Tea Ceremony

25

5

More Good  
Guys and Bad  
Guys

12

Dragonflies  
and the  
Nymph's  
Flowers

26

Samurais and  
Plum Blossoms

6

Members'  
Annual Dinner

27

Young Audi-  
ences Concert

7

The Uses and  
Folklore of  
Colorado Wild  
Plants, The  
Boulder  
Bassoon Band

28

Grass Walk at  
Chatfield  
Arboretum,

13

14

29

Plant Life Field  
Trip: Reynold's  
Pond Park

8

Natural  
History at  
Mount Goliath

22

Hot Rize  
August 22-25  
Glass at the  
Gardens

15

16

30

Hot Rize

9

17

10

Japanese Tea  
Ceremony  
Gentian Foray  
at South Park

24

Japanese Tea  
Ceremony

## Coming Next Month

September 5  
Colorado Wind  
Ensemble

September 6-7  
Members'  
Plant  
Giveaway

Denver Botanic Gardens, Inc.  
909 York Street  
Denver, Colorado 80206  
303-575-3751

**August 1985**

**TIME VALUE**

Address correction requested




---

Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

# Green

# N

# Thumb

# E

Denver Botanic Gardens

September 1985

Number 85-9



# S

## Members' Plant Giveaway September 6 and 7

It's time for the annual distribution of plants to DBG members. This year's selections will be offered on a first come, first served basis, on Friday, September 6 between 9 a.m. and 5 p.m. and Saturday from 9 a.m. to noon. Each membership category (student, senior, individual, family/dual, etc.) is entitled to one plant per membership.

A wide variety of both houseplants and hardier, outdoor plants is offered this year. A brief description of the plants follows beginning with the selections for indoor culture.

### *Aeschynanthus hosseusianus*.

A trailing member of the gesneriad family, this species possesses orange tubular, lipped flowers with pairs of opposite leaves. This basket plant is closely related to *A. radicans*, the lipstick vine.

### *Coffea arabica* — Coffee plant.

This foliage plant from the tropics of south Africa is indeed the supplier of coffee "beans," but for the average home it is a tall dark green foliage plant that grows up to seven or eight feet.

### *Euphorbia tirucalli* — Pencil tree.

A member of a predominantly succulent genus, it is characterized by a milky poisonous latex that should be kept from the eyes and mouth. The bold form of this small tree makes it a popular tree for interior gardens.

### *Felicia amelloides var. variegata* — Blue daisy.

This composite is a small shrub from South Africa that is closely related to our asters, but of course



### Inside:

*Great Getaway*  
page 2

*Guide Training Class*  
page 4

*Classes for Kids*  
page 4

*Classes for Adults*  
page 6

Conservatory  
staff members  
Karen Trout  
and Ron  
McLellan.

## September Lobby Display

If you've ever struggled through the difficult opening chapters of a botany textbook and wondered what all those strange-sounding plants—the ones that evolved before flowers appeared—actually looked like, the September Lobby Court display will interest you.

Using charts, floral diagrams, text and live plants from our greenhouse collections, "The Development of the Plant Kingdom" promises to be an engrossing look at this wonderful realm. It will be featured in our entry lobby from early September until mid-October, and visitors may enjoy it for no charge beyond our regular gate admission; members, of course are admitted free. School groups can arrange for reduced gate fees by calling 575-3751 extension 20.



*Flowers of the orchid *Phalaenopsis esmeralda*.*

## Orchid Auction

Orchid growers take note! The Denver Orchid Society will hold their Orchid Auction in John C. Mitchell II Hall at 7 p.m. on Tuesday, September 3.

The public is invited and admission is free. For additional details please call Kirk Hindley at 832-1444.

## Rose Society September Meeting

Herb Franson will provide a program titled "Growing Mini-Roses Under Lights" on Thursday, September 12 at 7:30 p.m. This monthly meeting of the Denver Rose Society will meet in the Denver Botanic Gardens House at 909 York Street.



## Great Getaways—Galapagos Islands Expedition

Dr. Moras Shubert and Denver Botanic Gardens' members are going to the Galapagos Islands in April!

In addition to studying the amazing vegetation and exciting animals, participants on this special tour will have a chance to see Halley's Comet. The last time DBG offered a tour of the famous Galapagos Islands was almost 11 years ago and many requests for another tour have been received since that time. This tour is planned for the season when the vegetation is greenest and all the animal species (including the birds) will be present except for the waved albatross which will be out at sea.

As an additional feature, Halley's Comet will be at its brightest April

### Tributes

- In honor of Molly and William S. Larson  
Don & Carolyn Fox
- In memory of Mrs. George Berger  
Mrs. Thomas E. Taplin
- In memory of James S. Clagett  
Morning Belles Garden Club
- In memory of Jayme K. McLean  
Virginia F. Beatty
- In memory of Dr. Gordon Murray  
Margaret G. Altvater  
Otto Eastlund, Jr.
- In memory of Mrs. Wilbur Newton  
Mrs. Thomas E. Taplin
- In memory of Aksel Nielsen  
Mrs. Thomas E. Taplin
- In memory of Mrs. George Simson, Jr.  
Mrs. Clyde A. Steinberger
- In memory of Isabel McIlvaine Steltzner  
Mr. & Mrs. James C. Rheem
- In memory of Al Stewart  
Mr. & Mrs. Robert Hite
- In memory of Jack Wallace  
Eileen Price
- In memory of Dr. William H. Wierman  
Ted & Peggy Boerstler  
Mr. & Mrs. Barkley L. Clanahan  
Mrs. P. H. Holme, Jr.
- In memory of Karl L. Mayer  
Mr. & Mrs. Earl W. Wilson

11, the time the group will be at the equator. Viewing should be excellent.

Space on the ship is limited to only 20 passengers and since so many have requested this trip, reservations should be made as soon as possible. Call Travel Associates, 759-8666, for the detailed itinerary and cost.

Dr. Moras Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience. His capable leadership makes this a once-in-a-lifetime opportunity for DBG members, including those who wish to join now.

## Green Thumb News Number 85-9 September 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than August 20 for October, September 20 for November, and October 18 for December.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.

## Plant Giveaway (cont.)

it is not hardy in our climate. This variegated variety is less frequently grown than others of the species. When fertilized regularly, the plant produces blue flowers through the year.

*Hedera helix* — English ivy. By way of a change we are offering different varieties of these ivies in four-packs this year. They make great hanging plants for plastic pots.

*Passiflora x alatocaerulea* — Passion vine. This hybrid vine has very recognizable, large flowers when it starts to mature. It requires plenty of room and support for its long trailing stems.

*Sansevieria trifasciata* cv. 'Bantel's Sensation.'

The common snake plant is the closest relative of this rare and slightly less hardy variety of the species.

Plants for outdoor culture will also be available as part of the give-away. These selections include:

*Fagus sylvatica* — European beech. We have a few green and purple leaved forms of this large and long lived tree. In Denver it may grow up to 40 feet.

*Zelkova serrata* — Hop hornbeam. This is a Japanese tree related to the elm but again not widely planted in our region. Because it is

not susceptible to Dutch elm disease it should be tried as a substitute for the elm tree.

Due to their popularity, we are offering a selection of some of our Rock Alpine Garden favorites. Among the choices will be androsace, chrysanthemums (rock garden types), *Iris cristata*, *Rosularia platyphylla*, *Veronica pectinata*, *Zauschneria californica*, and the popular new *delosperma*, or dwarf yellow ice plant from South Africa.



Children's World school group investigating a tub of aquatic plants.

## Denver Artists Guild Art Show

The Denver Artist Guild will exhibit paintings in all media (including oils, watercolors, pastels, and acrylics) Wednesday, September 4 through Sunday, September 8. This annual art show will be displayed in John C. Mitchell II Hall from 9 a.m. to 4:30 p.m. each day of the exhibition.

Denver Botanic Gardens' exhibit will present approximately 60 framed paintings plus many matted works which will be displayed on tables or in bins. A variety of landscapes, still lifes, florals, and

representational compositions will be shown. All works are for sale and DBG receives a percentage of the sales.

The public is most cordially invited to this showing.

## Ikebana Show September 28 - 29

The Denver chapter of Ikebana International will present a fall flower show in John C. Mitchell II Hall on Saturday and Sunday, September 28 and 29. Ikebana is an ancient art of Japanese floral arranging. Flowers are arranged according to definite rules of composition and meaning based on

harmony, simplicity, asymmetry and a closeness to nature.

There are over 3,000 different schools of Ikebana, each with its own set of guidelines. Seven different schools of Ikebana will be represented in this display of Oriental flower arrangements.

This show is open to the public from 10 a.m. to 4:30 p.m. on Saturday, and from 10 a.m. until 4 p.m. Sunday. Admission charge is \$1, in addition to the gate fee which applies to non-members of DBG. For ticket information, call Mrs. F. S. Bucher at 751-5552.

## New Conservatory Guide Training Program

Volunteer guides are the backbone of Denver Botanic Gardens' educational program. Over the years these dedicated guides have led thousands of groups of children and adults. Guides lead educational tours through the Conservatory—they are a vital link to the community.

In 1984 alone more than 3,000 school children and 1,500 adults were lead through the Gardens by DBG's volunteer guides. Tours of the Conservatory provide insights to the plants and communities of the tropical and sub-tropical regions of the world. Visitors can learn about the orchid that produces the "beans" for vanilla or the tropical monocot that develops bunches of fleshy fruit.

Would you like to join this team of ambitious, dedicated volunteers? Once each year DBG offers an opportunity to learn while contributing a valuable service. Anyone interested in learning more about plants and sharing that knowledge is eligible to attend.

This eight-week training program begins on October 9 and continues on Wednesdays through November 27 from 9:30 to 11:30 a.m. Participants will receive an orientation to the Gardens and its development and an introduction to basic botany and its language. Each class will consist of two parts: a classroom session that discusses aspects of the primary plant families represented in the Conservatory, and a tour to introduce students to the actual plants.

Participants need not be members to apply. A \$25 registration fee will be refunded after 40 hours of guiding. Current Conservatory Guides are encouraged to attend any session as a refresher course.

To register for this class, use the Education Department registration form in this newsletter. For additional details, call Carolyn Knepp in the Education Office at 575-3751, extension 20. Class size is limited, so pre-registration is necessary.

As part of the continuing education program for current guides, a series of monthly meetings will take place beginning on September 18. In Classroom C at noon, DBG Botanist Horticulturist Larry Latta will bring everyone up to date on changes that have occurred in the Conservatory since last spring. On October 16 plan to join your fellow guides at noon in

Classroom B for a discussion of tips for guiding various types of groups. On November 20 a noon sack lunch in Classroom C will be followed by a talk on ecosystems pertaining to the Conservatory.

The demand for guided tours of Denver Botanic Gardens is ever-increasing and educational programs such as guiding are of major importance. Consider becoming a member of the DBG educational team now.



*Aster sp.* by  
Emma A.  
Ervin.

## Education Department

### Friends of the Forest

**Saturday, September 28**  
**(one session)** Classroom A  
**Section I:** For children of ages 5-7  
10 a.m. to noon  
**Section II:** For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Have you ever seen a tree struggling to grow in a parking lot? Learn how you can become a friend of the forest. Find out why a forest is a community of helpers with each tree, flower, and creature playing its part in the survival of all. Tour the Gardens and listen to what trees can tell us about their different forest homes. Learn why trees help us breathe and are great air conditioners. Learn to identify trees by the shape of their leaves. Make a forest leaf print T-shirt and take home a blue spruce seedling.

**Instructor:** Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

**Fee:** \$6.50 members/\$7 non-members

**Limit:** 12

### Sweet Peas

**Tuesdays, October 1, 8, 15, 22**  
**(four sessions)** Classroom A  
**Section I:** 10 a.m. to noon  
**Section II:** 1 to 3 p.m.

For children of ages 3-5 and a parent

Please indicate your section on the registration form.

Parents and pre-school children, ages 3-5, can join us in a sunlit exploration of the wonderful world of seeds. See how seeds travel on the wind, float on oceans, and even hitch a ride. See the shapes of seeds from jungles to deserts, including the bird of paradise seed with its bright orange tuft.

Listen to the fairy story of *The Princess and the Pea*. Create a sweet pea sunbonnet, seed jewels to adorn and sparkle, and make seed clay prints.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$25 members/\$27.50 non-members (class fee covers a child and one parent)

**Limit:** 12

## Apple Bobs

Saturday, October 5

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

What is red, green, or yellow and the cousin of a rose? Become an apple expert and learn why apples were once a gift of autumn's harvest but can now be enjoyed all year-round. Learn why a green apple is named for a granny and find out why a golden apple tree was so valuable that it was kept under lock and key. See how pioneers made apple cider and make your own caramel apple. Create your own apple people puppets.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

## The Chocolate Factory

Saturday, October 12

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Take a tour of Mother Nature's confectionary and see the garden where sugar, spices, and chocolate grow. Learn how the sweetest candies are made from roots, seeds, and fruits. See how chocolate is made from the cacao seeds and discover which jungle orchid is used to make ice cream. All recipes will be served to immediately satisfy your sweet tooth.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

## The Botanic Big Band

Saturday, October 19

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Listen to the swinging beat of the Botanic Big Band and learn how to use nature's sounds from seeds, branches, and gourds to create your own musical instruments. Whistles, flutes, and drums will keep the beat of the Big Band sound. Our able band leaders will teach you Botanic

Big Band melodies so you can start your own era of swing.

Instructors: Jo Duranceau Cannon will be assisted by Barbara Grenoble and Peggy McCreary from the Grenoble Studio of Music Art.

Fee: \$6.50 members/\$7 non-members

Limit: 12



## Munch, Crunch

(one session) Classroom A

Section I: For children of ages 5-7  
Monday, October 21  
3:30 to 5:30 p.m.

Section II: For children of ages 8-11  
Tuesday, October 22  
4 to 6 p.m.

Please indicate your section on the registration form.

Take a journey into the world of carnivorous plants. Learn how a Venus fly trap "counts" to catch an ant, how the pitcher plant creates a deadly pond, and how the sundew tricks a bug. Each child who ventures into this garden will receive his own Venus fly trap.

Instructor: Jo Duranceau Cannon

Fee: \$8 members/\$9 non-members

Limit: 12

## The Fairy Ring

Saturday, October 26

(one session) Classroom A

Section I: For children of ages 5-7  
10 a.m. to noon

Section II: For children of ages 8-11  
1 to 3 p.m.

Please indicate your section on the registration form.

Join the leprechauns and listen to the Halloween tales of the fairy rings. Learn about mushrooms and

toadstools which appear at night for elves to sit on. Find out why mushrooms grow in a ring and never have flowers. Discover flowers that lure bats from belfries. Make ghosts appear on starry nights, create a mask that would scare even a witch, and open the door to your own haunted house.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

## Pumpkin People

(one session) Classroom A

Section I: For children of ages 5-7  
Tuesday, October 29  
3:30 to 5:30 p.m.

Section II: For children of ages 8-11  
Wednesday, October 30  
4 to 6 p.m.

Please indicate your section on the registration form.

Visit our pumpkin patch and create a cast of pumpkin people. From the jack-o'-lantern to the pumpkin cat, learn how to carve and paint pumpkins. Use fall's cornucopia to supply the nose for a witch or ears for a clown. See how pumpkins grow and taste the best of pumpkin concoctions.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

Fall  
1985

# Denver Botanic Gardens

CLASSSES

## Deciduous Shade and Ornamental Trees for Denver

Tuesdays, September 24, October 1, 8, 15, 22, 29  
Classroom C 7:15-9:15 p.m.  
Field Trip on Saturday, November 2 from 9 a.m. to noon (six sessions)



1985 Summer Intern Kent Patton.

Due to this unique climate, very few trees are actually indigenous to the Denver area. It is not so much cold hardiness but soil, moisture, humidity, and extreme fluctuations in temperature that make it so difficult for trees to survive.

This class will acquaint students with a variety of plant materials and will establish an understanding of their characteristics, natural history, culture, problems, and landscape value.

Through the use of slides, students will observe each of approximately 100 species, with an emphasis on fall characteristics. A field trip is included for a first-hand look at some of the species discussed in class.

**Instructor:** Jeffrey Frank studied horticulture at Pennsylvania State University and earned a master's degree in landscape architecture from the University of Virginia. He is presently in private practice in Denver.

**Fee:** \$45 members/\$49.50 non-members

## Designing Your Home Landscape

Saturdays, October 5, 19 (two sessions)  
Classroom B 1 to 5 p.m.

Your home landscape should have a unique character and suit your needs and desires. Planning now means you could enjoy a beautiful new landscape next summer!

## Watercolor and Mixed Media Painting

Saturdays, October 5, 12, 19, 26

November 2, 9

(six sessions)

Classroom B 1 to 3 p.m.

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

**Instructor:** Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College, and Colorado Women's College. Dr. Ross is a life member of the Arts Students League of New York where she studied under Hans Hofman, Will Barnett, Marion Cooper, and Edgar Whitney.

**Fee:** \$48 members/\$53 non-members

**Limit:** 20

## Botanical Illustration—Harvest Time

Tuesdays, September 24, October 1,

8, 15, 22, November 5

(skip October 29)

(six sessions)

Classroom B 9:30 to 11:30 a.m.

In this introductory course, you will learn how to draw fall fruits, flowers, seeds, and berries accurately in pen and pencil and will finally progress to watercolors. Increase your knowledge, observation, and enjoyment of plants at the Gardens in autumn.

Paper, pencils, and erasers will be provided.

**Instructor:** Angela Overy received her National Diploma of Design from London University, England and designed in London, New York, and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

**Fee:** \$53 members/\$58 non-members (includes \$5 for materials).

**Limit:** 20

## Basketry Techniques

Tuesdays, October 1, 8, 15, 22, 29  
(five sessions) Morrison Center

**Section I:** 12:30 to 4 p.m. except October 1 when the class meets until 4:30 p.m.

**Section II:** 6:30 to 10 p.m. except October 1 when the class begins at 6 p.m.

Please indicate your section on the registration form.

Learn the traditional Appalachian egg basket and some of its variations. The gracefully-shaped baskets originated in Scotland and came to America with the Highland settlers. Students will learn this rib and split technique in a variety of shapes and can expect to complete one basket each session.

Please bring sandpaper, a jack-knife or pocket knife, an awl, knitting needle, or very large nail, spring-type clothespins, an old towel, and kitchen or pruning shears.

**Instructor:** Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

**Fee:** \$95 members/\$105 non-members (includes a \$35 materials fee for the construction of five baskets).

**Limit:** 10

## Natural Basketry

Thursdays, October 3, 10, 17, 24, 31  
(five sessions) Morrison Center

**Section I:** 12:30 to 4 p.m. except October 3 when the class meets until 4:30 p.m.

**Section II:** 6:30 to 10 p.m. except for October 3 when the class begins at 6 p.m.

Please indicate your section on the registration form.

When incorporated into baskets, locally gathered plant materials create wonderful textures and visual excitement. Learn the specifics of collecting cattails, grapevines, iris leaves, bullrushes, and bark and add them to the four baskets each student will construct.

Please bring sandpaper, a jack-knife or pocket knife, an awl, knitting needle, or very large nail, spring-type clothespins, an old towel, and kitchen or pruning shears.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$88 members/\$97 non-members (includes \$28 for the construction of four baskets)

**Limit:** 10

## Basketry Workshop: Round Spoke and Split Basket

Saturday, October 26

(one session)

9 a.m. to 4 p.m. Morrison Center

Learn how to make a traditional Appalachian spoke and split basket in this one-day workshop. In it, a



**DBG**  
*Administrative Assistant  
Joyce Schillen puts her Appalachian egg basket to good use.*

series of flat splits radiate outward from the center of the basket's bottom. As it is worked upward, it can take a variety of shapes, all of them round.

No previous experience is necessary and students can expect to complete a basket 11 inches



*Round spoke and split basket by Robin Taylor Daugherty.*

across and 12 inches tall (includes handle). Please bring sandpaper, a jackknife or pocket knife, an awl, knitting needle or very large nail, spring-type clothespins, an old towel, kitchen or pruning shears, and a sack lunch.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials).

**Limit:** 10

## Basketry Workshop: Market Basket

**Saturday, October 12  
(one session)  
9 a.m. to 4 p.m. Morrison Center**

Learn how to make a traditional New England market basket using the square to round technique. The basket has a slightly open bottom for good ventilation and firmly woven sides in a twill pattern. The result is an ideal gift that lends itself to a wide variety of uses.

No previous experience is necessary and students can expect to complete a basket approximately 8 inches by 12 inches. Please bring sandpaper, a jackknife or pocket knife, an awl, small hammer, knitting needle or very large nail, spring-type clothespins, an old towel, kitchen or pruning shears, and a sack lunch.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials)

**Limit:** 10

*Botanical Illustration student Mary Roserick (seated) and instructor Angela Overy.*



*Market basket by Robin Taylor Daugherty.*



## Cooking with Filo Dough

**Saturday, October 5  
(one session)  
Classroom B 9 a.m. to noon**

Discover the surprisingly simple secrets of no-fail cooking with filo (phyllo). Appetizers, main courses, fancy vegetables, and scrumptious desserts are all easy and elegant when prepared with purchased filo dough. Learn how to make spanakopeta, sweet and savory strudels, baklava, spicy cheese triangles, and more. Lots of tasting included!

**Instructor:** Sue McPherson Clark has co-authored *Wild Food Plants of Indiana* and *Edible and Useful Wild Plants of the Urban West* and has extensive teaching experience.

**Fee:** \$16 members/\$17.50 non-members (includes \$4 for materials)

**Limit:** 15

## Easy Baking with Yeast

**Saturday, October 19  
(one session)  
Classroom B 9 a.m. to noon**

Learn how to prepare delicious yeast breads. Find out how to make bagels, English muffins, coffee cakes, orange-cinnamon rolls, sticky buns, pizza, herb breads, and more! Hot from the oven samples will be tasted in this aroma-filled class.

**Instructor:** Sue McPherson Clark

**Fee:** \$16 members/\$17.50 non-members (includes \$4 for materials)

**Limit:** 15

**Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206**

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

## Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

# L I B R A R Y

## L I N E S

Helen Fowler Library  
Volume 8, No. 4  
September 1985  
Guest Editor,  
1985 Summer Intern  
Becky Thayer

Librarian:  
Solange Gignac

### The 100-Year-Old Cactus

By Anita Holmes. Four Winds Press, New York, 1983. \$10.95. j QK 495 C11 H6560 1983.

*The 100-Year-Old Cactus* is a good book about a saguaro cactus in the Arizona desert. It starts out with a little black seed. It grows bigger and bigger very slowly. A woodpecker looks at the cactus and pecks at the tough green skin. The sharp spines don't bother the woodpecker. His mate helps and they peck a hole the size of a football for their nest and its little white eggs.

Flowers grow on the cactus and the woodpeckers and other animals drink the nectar. When the woodpecker eggs hatch, the parents look for food for the babies. They find

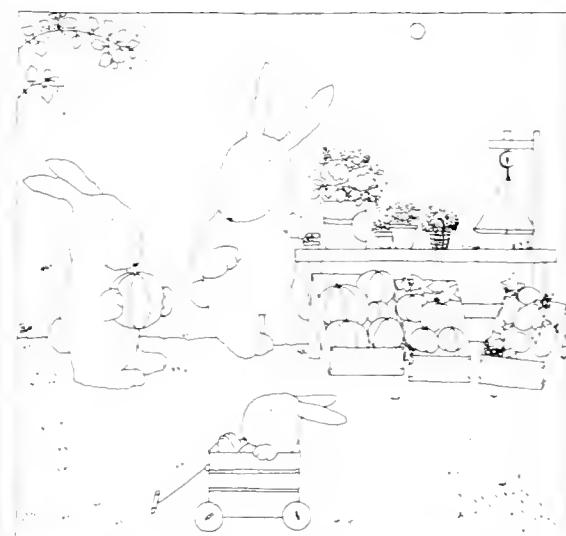
beetles under the cactus spines and other insects in the long branches. They also eat the cactus fruit, which is red and juicy. When the baby woodpeckers are old enough to fly alone, the whole family moves out of the saguaro. Other animals move into the empty hole. The cactus is very old, and probably still growing.

Eren Fry



### Rabbit Seeds

By Bijou LeTord. Four Winds Press, New York, 1984. \$9.95. j PZ 7L5 1984.



I liked a book called *Rabbit Seeds*. It's about a rabbit who plants some seeds. He takes out his tools and plants lettuce, carrots, and sweet peas. He watches his plants grow. He watches them get bigger. In the fall when the leaves turn colors, the rabbit puts away his tools. The leaves will protect his garden for the winter. This book has nice drawings.

Eren Fry

### THE REVIEWERS

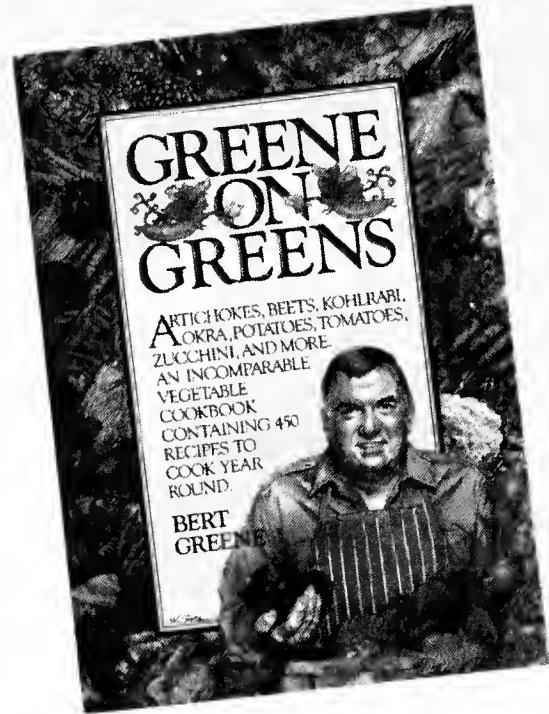
Jan Caniglia—  
Landscape  
Architect,  
ASLA

Eren Fry—  
A second  
grader at  
Asbury  
Elementary.  
He represented  
his school at  
the Young  
Author's  
Conference.

Robert E.  
Heapes—  
Well-known  
wildflower  
photographer;  
naturalist at  
Roxborough  
State Park

Patricia A.  
Pachuta—  
Education  
Director,  
Denver Botanic  
Gardens

By Bert Greene. Workman Publishing Company, Inc., New York, 1984. \$19.95. TX 801 G7 1984.



*Greene on Greens* is a terrific cookbook. Author Bert Greene accurately describes it as his love letter to the thirty or so vegetables, green and otherwise, that he prizes most in the world.

From artichokes to zucchini, they are all alphabetically arranged and each vegetable is presented in a separate chapter. A cookbook arranged this way demands a careful, thorough index and fortunately, this one delivers. Otherwise, an attempt to make soup, for example, would be complicated by frustrating attempts to check each individual chapter's offerings.

Greene's book addresses a very common shortcoming of many cooks and meal planners: after the main course is decided upon, its vegetable accompaniments are little more than afterthoughts. *Greene on Greens* presents alternatives to the monotonous "potatoes and green salad" syndrome and provides imaginative inspiration to the vegetable gardener looking forward to a bountiful harvest.

And the recipes! Who could resist the elegant appeal of Asparagus and Shrimp Salad, Sauteed String Beans with Bay Scallops, or New Potatoes Sliced in Tarragon Cream? On the other hand, there are times when hearty, straight-forward fare is appropriate. Choose from the likes of Potato Latkes, Pumpkin Rolls, Red Flannel Hash, Scalloped Sweet Potatoes, or Bubbling Tomato Chicken.

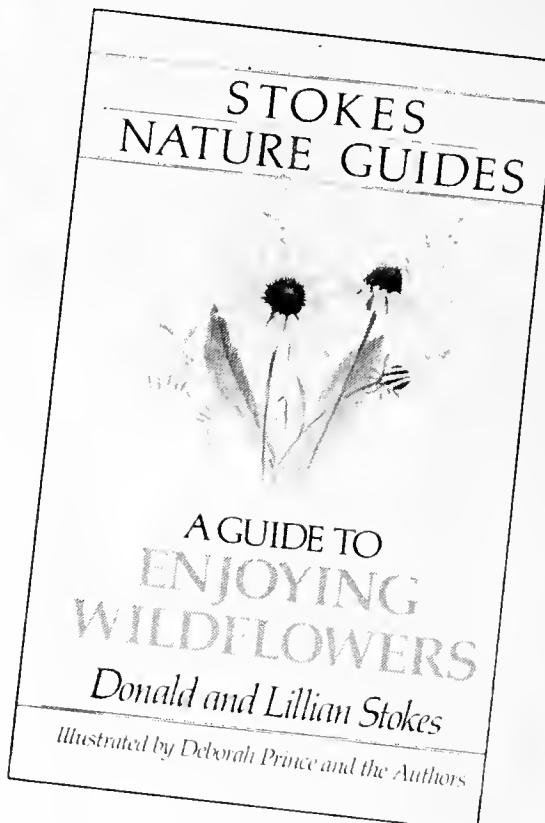
The 450 recipes will make your vegetable dishes the center of attention and are bound to encourage you to experiment with such unfamiliarities as fennel, kohlrabi, and even parsnips.

Such a tantalizing volume is apt to be quite popular and as a result, I bought my own copy. I can't think of a stronger recommendation.

Patricia A. Pachuta

### *A Guide to Enjoying Wildflowers*

By Donald and Lillian Stokes. Little, Brown and Co., Boston, 1984. \$18.95. QK 110 S76 1984.



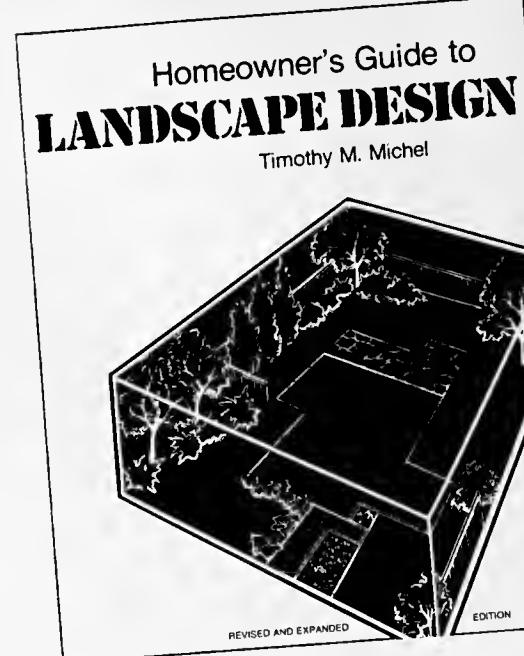
This new book is an extensive accounting of 50 wildflowers including, not only the usual visual identification characteristics, but old tales of folklore and the history of the plants. Many species are common weeds with uncommon stories. Dandelion, clover, and bindweed stories are so well presented that you forget their weedy characteristics! Lovely stories accompany the anemone, daisy, lady's slipper, violet, and many more as the Stokes tell us how the structure and design of wildflowers guide the behavior of pollinators and how they are related to garden species.

The most outstanding features of the book, however, are the 50 full-page color renderings—one for each species. These paintings by Deborah Prince are truly different and the treatment of the "negative space" is unusual. Most wildflower paintings have a sameness about them, but I know everyone will be pleased with these exquisite paintings. This is a fine addition to your wildflower library, and a special value to the wildflower artist.

Robert E. Heapes

### *Homeowners Guide to Landscape Design*

By Timothy M. Michel. The Countryman Press, Woodstock, Vermont, 1983. \$10.95. SB 473 M5446 1983.



Using this book is like having a landscape design instructor at your shoulder as you work on your home grounds development. The essentials for step-by-step planning and design are set out in a concise text and simple illustrations. Unlike older design books, it sets out a process for design, not a collection of answers, and it is generic enough to fit a suburban single-family residence in any geographic area.

Valuable lists of common design pitfalls serve as checklists; these pages will be used a lot. Concise pointers on visualizing and three-dimensional design, on surveying and analysis, and on specific design of common site features are included.

For some other essentials of landscape design, you'll need another "instructor." Coverage of important design forces—maintenance, earth-forming, and drainage—is placed in the back of the book, and is incomplete. Pruning is given the same amount of space as the complex and expensive process of contracting and construction. Plant design for Colorado demands several other books and sources.

On the whole, you'll be better off with this book than without it, using it in tandem with others. It is better than those which are oriented to Eastern or West Coast problems, and the collections of design cliches we find on the market.

The linear step-by-step process is a good check on the system most people use in design—a feed-forward/feed-back loop. Using this as a manual is a good step toward success.

Jan Caniglia

## Gardening Tips for September

Do your perennial and shrub borders burst forth in a magnificent display of iris, delphiniums, and roses in June only to lapse into a verdant monotony later in the summer? Are you relying on annuals to pick up your garden and carry it through until frost? It's a shame that most of our gardens settle into a petunia-and-geranium sameness just when our best out-of-doors season arrives, those late summer days of moderate evening temperatures and invigorating mornings when Coloradans can enjoy their yards the most.

Now is the time to review the performance of your garden, before the first killing frosts turn your attention to the excitement of Thanksgiving and the opening of the ski season. Let's explore ways to improve its late summer display next year.

First, it would be profitable for you to investigate "new" species that you have previously overlooked. Since spring is our main planting season, it also holds our attention fast when we try to think of other aspects of the garden, so, while we can recite the names of dozens of plants that bloom during or shortly after the season of planting, we fall short when trying to remember those blossoms that come much later. Here's a brief list to stimulate your imagination:

Yarrow (*Achillea filipendulina*, yellow, and *A. millefolium*, pink) is medium to tall and has flat umbels of small flowers which last well.

Monkshood (*Aconitum sp.*) blooms in deep colors of blue and tolerates light shade.

Butterfly weed (*Asclepias tuberosa*) has flowers in brilliant shades of orange which are often difficult to reconcile with surrounding colors, but provides an unusual spark for a dull border.

Perennial asters (*Aster frikartii* and *A. novi-belgii*) are old stand-bys that have fallen into disregard; for a sunny spot they are worth bringing back.

Fringed bleeding heart (*Dicentra eximia*), unlike its early spring counterpart (*D. spectabilis*), blooms throughout the season and does well with more sunshine.

Coneflowers (*Echinacea purpurea*), in either rose or white, are dramatic "daisies" for either sun or light shade.

Crane's bill (*Geranium grandiflorum*) offers a delicate, softening look with its lavender-pink or white flowers on slender stalks.

Geum, or Chilean avena, (*Geum chiloense*) is low growing and, in shades of yellow and red, is suitable for the front of a border.

Baby's breath (*Gypsophila paniculata*) does the same as the cone-flowers; usually white, it also is a popular addition to bouquets.

St. John's wort (*Hypericum moseranum*) is low enough to also serve as a ground cover where bright golden flowers would be welcome.

Red hot poker (*Kniphofia uvaria*) offers a welcome spiky inflorescence to contrast with the dominant display shapes of the season. It is orange and red but other species are available in white, cream, or yellow.

Lily turf (*Liriope muscari*), though not absolutely reliably hardy here, is worth trying in a protected spot for its interesting foliage alone, but its late blue flowers make it doubly attractive.

None of these perennials is rare; all are available either locally in the spring or from mail-order sources. If you are interested in attempting even more unusual plants, though, you should stroll our Perennial Border and the Rock Alpine Garden.

After the rose-of-Sharon (*Hibiscus syriacus*) and butterfly bush (*Buddleia alternifolia*) have flowered it often seems that the shrub border is on the decline for the season, but that needn't be so. Consider these additions to your yard to contribute late summer color among your woody plants:

Smoke bushes (*Cotinus spp.*) bloom whitish purple and often sport colorfully dark foliage as well.

Hydrangea (*Hydrangea arborescens* cv. 'Grandiflora') does well in shade where its globular heads of white flowers are especially welcome.

Shrubby St. John's wort (*Hypericum prolificum*) is one of the few yellow-flowered shrubs available at this season.

Kerria (*Kerria japonica*), also with yellow flowers, is reliably hardy here; it blooms well in the shade and has attractive, bright evergreen twigs. The double-flowered form is preferred.

And, lest we forget, there are roses beyond the hybrid teas whose blossoming nearly always is divided between two short bursts, in June and in September. The floribunda roses, whose flowers nearly rival the teas in form, are much more dependable for season-long bloom, especially if old blossoms are snipped off immediately. The rugose rose (*Rosa rugosa*) and its hybrids also tend to bloom through late summer.

To frame the late summer garden several vines have blossoms that can be depended upon: clematis (several species and hybrids in all colors, even yellow), silver lace vine (*Polygonum aubertii*), and trumpet vine (*Campsis radicans*) are tough and reliable for our area.

Besides the addition of new kinds of plants to your garden, consider also late-blooming varieties of plants you may already grow. Some day-lilies (*Hemerocallis* hybrids) bloom as late as mid-August. A careful choice of other lilies (*Lilium* species and hybrids) can extend their season into September with the use of the groups known as Division 6 (trumpet-shaped) and Division 7 (bowl-shaped); both of these classes are wonderfully fragrant. Even some bearded iris are remontant, that is, they'll bloom again in the fall during exceptionally good growing seasons.

Finally, here's a tip to get the most from some perennials (and even some of those annuals you plant every year) to ensure summer color: dead-head. Remove spent flower spikes promptly throughout the season; this encourages branching and re-blooming and, although the resulting flowers may not be the equal to those produced earlier in the year, they'll certainly be welcome late in the season when our yards tend to go green.

**Larry Latta**  
Botanist Horticulturist  
at Denver Botanic Gardens

C

A

L

E

N

D

A

R

**SEP**  
**TEMBER**

**Regular Meetings  
of Plant Societies**

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

S  
1M  
2T  
3W  
4T  
5F  
6S  
7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

**Coming Next Month**

 October 1  
 Basketry  
 Techniques,  
 Sweet Peas

 October 3  
 Natural  
 Basketry  
 October 5  
 Cooking with  
 Filo Dough,

 Designing Your  
 Home Land-  
 scape,  
 Watercolor and  
 Mixed Media  
 Painting, Apple  
 Bobs

 October 9  
 Conservatory  
 Guide Class  
 October 12-13  
 Rocky Mtn.  
 Bonsai Show

 October 12  
 Basketry  
 Workshop:  
 Market Basket,  
 The Chocolate  
 Factory  
 October 21 or 22  
 Munch, Crunch

 October 19  
 Easy Baking  
 with Yeast,  
 African Violet  
 Show, The  
 Botanic Big  
 Band

 October 26  
 Basketry  
 Workshop:  
 Round Spoke  
 and Split  
 Basket, The  
 Fairy Ring  
 October 29  
 Pumpkin  
 People  
 October 30  
 Associates'  
 Annual  
 Luncheon,  
 Pumpkin  
 People

**Denver Botanic Gardens, Inc.**  
 909 York Street  
 Denver, Colorado 80206  
 303-575-3751

**September 1985**
**TIME VALUE**

Address correction requested



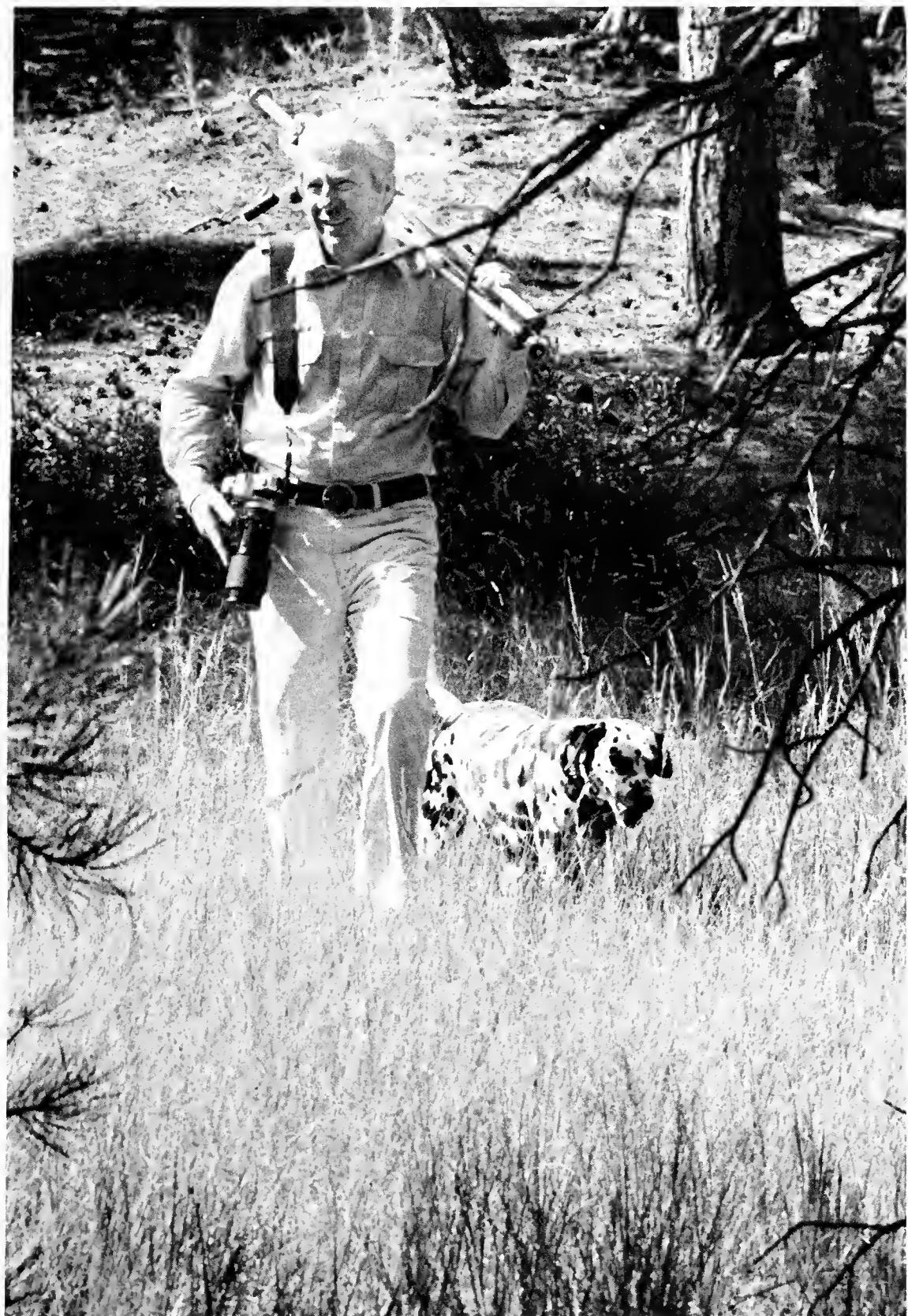
Non Profit Org.  
 U.S. Postage  
 PAID  
 Permit No. 205  
 Denver, CO

Green

Thumb

N E

## Seventh Annual Carl Tempel Wildflower Lecture to Feature Bob Heapes



Denver Botanic Gardens

October 1985

Number 85-10



W S

*Inside:*  
Associates' Annual Luncheon page 2

Holiday Gift Shop Sale page 3

Classes for Adults page 6

Classes for Kids page 10

Bob Heapes, well-known local photographer and naturalist, will present the Seventh Annual Carl Tempel Wildflower Lecture on Friday, November 1, at 7:30 p.m. in John C. Mitchell II Hall.

A civil engineering graduate of the University of Colorado, Bob is a popular field trip leader and also serves as a naturalist at Roxborough State Park. His keen eye and artistic appreciation of nature contribute greatly to his success as a photographer.

Active in the Colorado Native Plant Society, Nature Conservancy, Colorado Mountain Club as well as Denver Botanic Gardens, he has had photos published in *Colorado Homes and Lifestyles*, *Pacific Horticulture* and *Horticulture* magazines.

In his program, "Ten Thousand Feet of Flowers," Bob will take viewers from the high plains to the tundra, from four to fourteen thousand feet, to see dozens of Colorado wildflowers in both peak bloom and fruit.

The Carl Tempel Wildflower Lecture Series was inaugurated in 1979 to honor the late Major General Carl W. Tempel of Fitzsimmons Army Medical Center, who was a great lover and photographer of wildflowers. His wife, Ruth Tempel, is a dedicated and valuable volunteer in our Gift Shop.

Admission to the lecture is without charge and all are encouraged to attend and enjoy the beautiful slides and good-natured humor of this talented photographer who has hiked thousands of miles throughout Colorado. "Ten Thousand Feet of Flowers" is not to be missed!

*Bob Heapes, popular DBG field trip leader and naturalist*

## 2 Associates' Annual Business Meeting and Luncheon

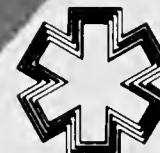
Recently Denver Botanic Gardens received accreditation as a museum by the American Association of Museums (A.A.M.). An important contributing factor in the receipt of this honor was the volunteer efforts observed by the visiting committee which conducted the on-site evaluation for A.A.M. In their report recommending accreditation they stated that "along with membership there has evolved a large, active and effective group of volunteers that appears to be found in every niche



Executive Director Merle Moore with Virginia Faxon at the 1984 Associates' Annual Luncheon.

of the Gardens. During our visit, we were delightfully surprised to find so many volunteers working in the Gardens and could not really tell the difference between them and the paid staff."

Merle Moore, DBG's executive director, gives his thanks to the Associates for their efforts on Wednesday, October 30 at 1 p.m. His presentation, "Denver Botanic Gardens—A Living Museum," will conclude the annual business meeting, award ceremony and luncheon. He will be joined by several other members of the staff in highlighting some of the plant collections and programs that have made the Gardens one of only 10 such institutions in the United States to be so honored by A.A.M. A brief period for socializing and



### The Accreditation Commission of the American Association of Museums

certifies that

### Denver Botanic Garden

has demonstrated a professional level of operation in accordance with the standards of excellence prescribed by the American Association of Museums, and is hereby awarded this certificate of accreditation.

*Jan M. Lueber* 1984

Chairman  
Accreditation Commission

Date

viewing photos of volunteers at work will precede the noon luncheon.

October is the time to complete your service record for the past year and to renew your membership with the Associates. If your hours have not been turned into your chairman prior to October 1, phone Virginia Faxon, 377-0235, by October 14.

Invitations are in the mail; please return them in time to assure yourself a place at this year's Associates' Annual Meeting and Luncheon and congratulate your colleagues for their contributions and jobs well done.

#### Tributes

In memory of Jane McCollum Brown  
Chad & Sally Brown Breckenridge

In memory of Mrs. Ruby B. Elliott  
Mr. & Mrs. Wayne K. Bullock  
Mr. & Mrs. James R. Garcia  
Mrs. Phyllis E. Garcia

In memory of Josephine C. Laveo  
Grace G. Kimmel

In memory of Judge Gerald McAuliffe  
Elizabeth Heacock

In memory of Mrs. W. D. (Cora) Van Stone  
Margaret M. Wilber

In memory of Jack Wallace  
William G. Gambill, Jr.

In memory of G. Kenneth Wersebe  
David & Virginia Park

### Denver Rose Society Monthly Meeting—October 10

The Denver Rose Society will meet on Thursday, October 10 at 7:30 p.m. in the Denver Botanic Gardens' House. The program will be "Around the Seasons in the Garden," a slide show given by Norm Page. Visitors are welcome.

### Green Thumb News Number 85—10 October 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than September 20 for November, October 18 for December, and November 20 for January.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the  
American Association  
of Museums



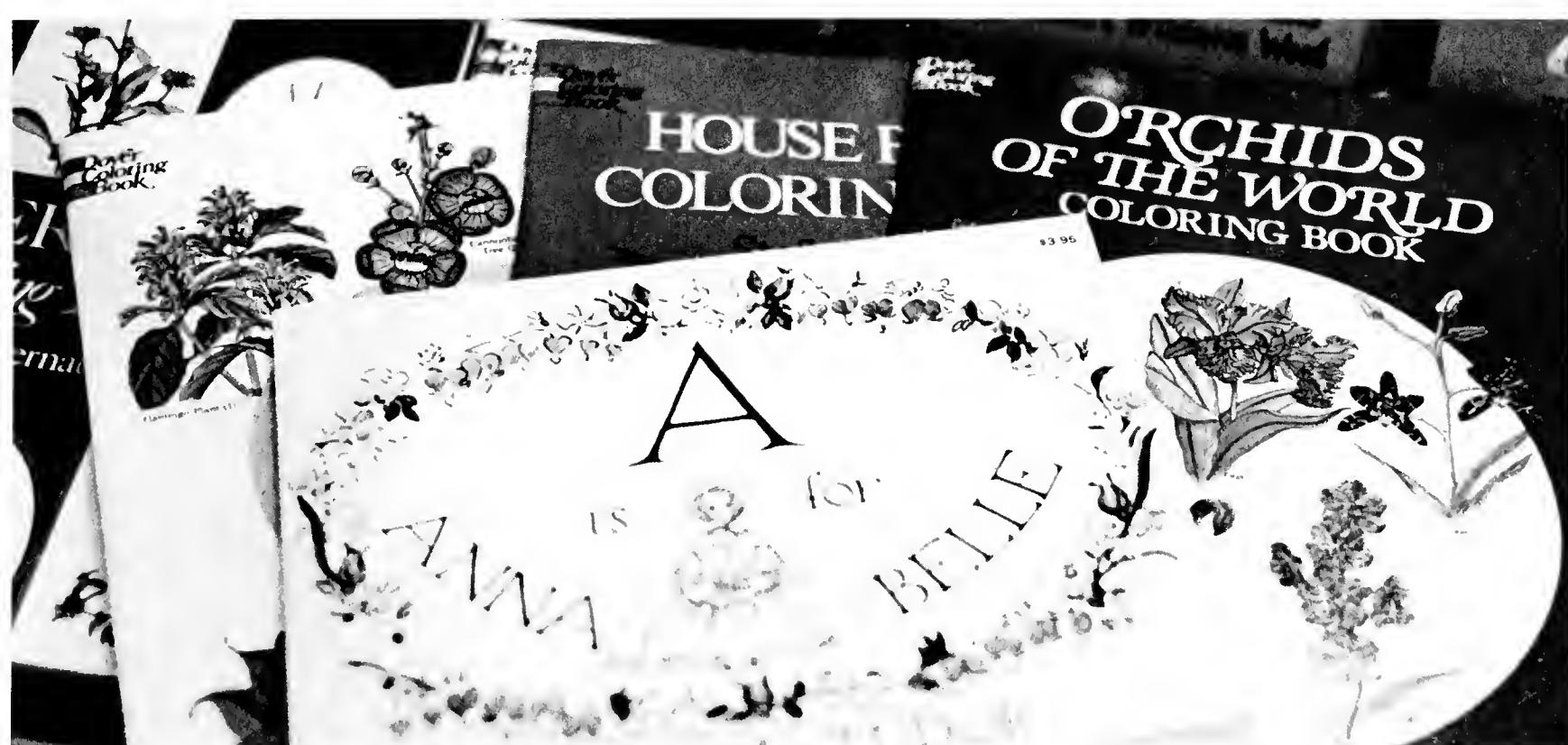
DBG volunteer Lucia Johnson helps bottle vinegar for Gift Shop Sale.



Philippine shell owls—new items in DBG Gift Shop

Everlastings, ornaments, vinegar, jewelry, toys and books for holiday gift-giving and entertaining! Seemingly inexhaustible collections of dried plant material for arrangements, wreaths or whatever the imagination can concoct. Cloisonne from the Orient, tree ornaments from Mount St. Helens, ceramics from Uruguay and old world music boxes. All this and more await shoppers at Denver Botanic Gardens' Gift Shop's Annual Holiday Sale.

Shoppers eagerly anticipate the sale's beginning hours. This year the Lobby Court, John C. Mitchell II Hall and the Gift Shop doors open on Friday, November 22 at 10:00 a.m. and close at 4:30 p.m. on Saturday, November 23. Watch the November *Green Thumb News* for a more complete shopping list. Shopping hours for both days are 10:00 a.m. to 4:30 p.m.



## 4 | New Horticultural Therapy Intern



Heather Yancey, new horticultural therapy intern

Six-month internships in horticultural therapy at the Pauline A. and George R. Morrison Horticultural Demonstration Center provide students with valuable experience that prepares them for professional positions. Heather Yancey, our new intern, began work on August 1 and will assist DBG Horticultural Therapist Judy Carrier until the end of 1985.

Heather has prepared herself by studying at Guilford College and working at the National Institute of Health. After studying horticulture at Northern Virginia Community College she was an interior gardener at the Smithsonian Institution in Washington, D.C. Presently completing her bachelor of science degree in horticultural therapy from Kansas State University, Heather believes the field provides a holistic approach for creating learning and growing challenges in an individual's life.

During her internship she will plan, initiate and implement a horticultural therapy program for five local service agencies. Heather will also organize and present a workshop this winter and complete a series of educational handouts on accessibility considerations for greenhouse design.

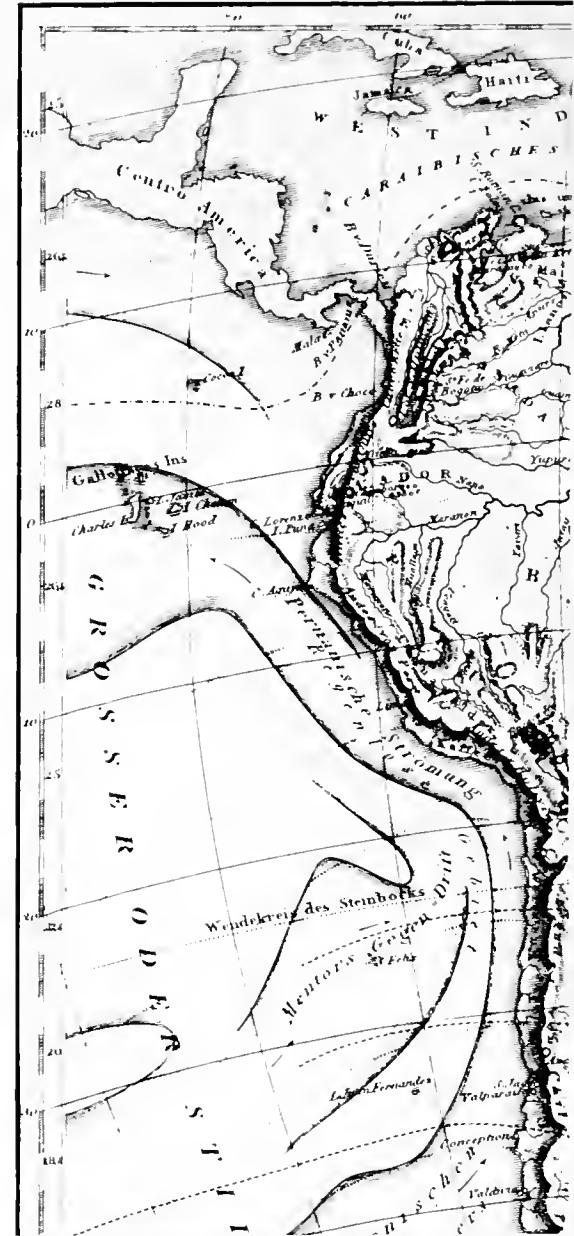
## Great Getaways— Galapagos Islands

Everyone who has seen pictures of the Galapagos Islands is familiar with the fascinating animals, but how many know about the scalesia tree forests? These are forests composed of trees belonging to the sunflower family, and at higher altitudes they have epiphytic orchids, ferns, mosses and many other plants growing along their branches. These trees, like the finches described by Darwin, exist only in the Galapagos Islands.

Nearly 80 percent of the plant species growing in the Galapagos are endemic, having evolved there just as the 13 species of Darwin finches have.

Adventurers on this Denver Botanic Gardens' Getaway will have the chance of a lifetime to see the finches, scalesia forests and Halley's Comet and much more. Dr. Moras Shubert will lead this exciting expedition in April of 1986.

Call Travel Associates, 755-8666, for the detailed itinerary and cost. Space is rapidly filling up and this may be the final announcement for this adventure.



## DBG's Pumpkin Patch

Denver Botanic Gardens is offering visitors an opportunity to enjoy one of autumn's pleasures—a pumpkin patch. Observe how

pumpkins grow and view hundreds of long, short, fat and distorted examples in the area adjacent to the Aquatic Plant Display.



A bonsai artist creates a dwarfed tree that represents its true natural spirit and living beauty, while creating a feeling of tranquility through the illusion of age.

At Denver Botanic Gardens on Saturday and Sunday, October 12 and 13, the Rocky Mountain Bonsai Society will hold their annual show in John C. Mitchell II Hall from 9 a.m. to 4:30 p.m.

Put simply, bonsai is the Japanese art of growing small trees or shrubs in pots or on stones. Variations developed from years of cultivation represent the primary growth forms found in nature. The five most common styles are the formal upright (*Chokkan*), informal upright (*Tachiki*), slanting (*Shakan*), semi-cascade (*Han-Kengai*), and cascade (*Kengai*).

This art form developed in Japan partially as a result of over-crowding and a need to bring the forest's beauty and tranquility into the personal space of the home, and partially out of respect for long life.

Rather than reproducing only the appearance of large trees in miniature, bonsai growers create an illusion of age. Many have stated that the beauty of bonsai is ageless. Through design and technique derived through centuries of study, bonsai artists have taken advantage of common visual preconceptions associated with age to create the illusion.

Bonsai are like ordinary trees because they are ordinary trees. They are simply grown with a care not found in nature and they may live longer than many trees found in natural settings.

Local enthusiasts are fortunate to have some of the foremost masters and teachers living in the Denver area. Three demonstrations are scheduled for each day of the Bonsai Show, one at 11 a.m., 1 and 3 p.m., and each will feature an expert who will describe through examples the basic techniques of bonsai.

In addition to the non-member gate admission fee, there will be a \$.50 charge for visitors 16 and over. Children under 16 will be admitted free.

The high quality of bonsai provided by the Society for this show will introduce visitors to the harmony found in this art form and is certain to make enthusiasts of all.

## African Violet Fall Sale

The Rocky Mountain African Violet Council will hold its 1985 annual fall African Violet Sale on Saturday, October 19. The ever-popular starter plants and leaves, as well as blooming violets, will be found throughout John C. Mitchell II Hall from 9 a.m. to 4:30 p.m.

The Council is a non-profit organization consisting of 16 clubs ranging from Longmont to Colorado Springs. Members of these clubs will provide plants from their own collections for the sale in an attempt to stimulate interest and appreciation of African violets and other gesneriads. They will be on hand to answer questions on pest control, culture and maintenance of these celebrated houseplants.

The non-member gate fee will be in effect, but admission to the sale is free. Plan to be one of the new participants in this rewarding gardening activity and attend the sale.



## CONPS Annual Meeting—Colorado Water Issues

As Colorado's population increases, so increases the consumption of water. How much growth can Colorado absorb without reaching the limit of available water? As the technology of water transport and storage is improved, this limit is seemingly raised...but at what price?

These are some of the problems being looked at by the Colorado Native Plant Society (CONPS) at their 1985 annual meeting, "Water, Wetlands and Native Plants." The program will be held Saturday, October 19 from 9 a.m. to 5 p.m. at the Events Conference Center of the University of Colorado, Boulder Campus.

Included in the program will be a choice of two morning field trips, one a xeriscape landscape tour of Boulder and the other a tour of the Boulder Creek Riparian Project. The afternoon will feature sessions on Colorado water issues.

This meeting, sponsored by the Boulder Chapter of CONPS, is free and open to the public. For more information contact Sue Galatowitsch, 459-3243, or Ann Cooper, 447-9169. Reservations are required only for the tours.

## Education Department

### Watercolor and Mixed Media Painting

**Saturdays, October 5, 12, 19, 26  
November 2, 9  
(six sessions)  
Classroom B 1 to 3 p.m.**

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

**Instructor:** Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College, and Colorado Women's College. Dr. Ross is a life member of the Arts Students League of New York where she studied under Hans Hofman, Will Barnett, Marion Cooper, and Edgar Whitney.

**Fee:** \$48 members/\$53 non-members

**Limit:** 20

### Designing Your Home Landscape

**Saturdays, October 5, 19  
(two sessions)  
Classroom B 1 to 5 p.m.**

Your home landscape should have a unique character and suit your needs and desires. Planning now means you could enjoy a beautiful new landscape next summer!

The two classes consist of slide lectures, demonstrations, discussions, and local resources. Topics include design procedures and principles, Front Range ecology, historic landscapes, irrigation, paving, and structures. This course is for those with urban or suburban homes as well as large semi-rural properties. The problems of new or "boring landscapes" and those in need of renewal will all be covered.

**Instructor:** Janet M. Caniglia has practiced landscape architecture for six years in the areas of residential and commercial design, environmental planning, and community design. She has taught numerous classes in landscape design.

**Fee:** \$32 members/\$35 non-members

**Limit:** 15

# CLASSES

Fall  
1985

Denver Botanic Gardens

## Japanese Tea Ceremony

Section XVI: Sunday, October 20

Section XVII: Saturday, October 26

(one session) 2 to 3 p.m.

Tea House in DBG's Japanese

Garden

Please indicate your section on the registration form.

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility, and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

**Instructor:** Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan.

**Fee:** \$4.50 members/\$5 non-members

**Limit:** 15

## Planting to Attract Wildlife

Thursdays, December 5, 12

(two sessions)

7 to 9 p.m. Classroom C

Even the urban dweller can attract wildlife to his yard. If the thought of luring cedar waxwings or cottontail rabbits appeals to you, this two-session course will provide the necessary details. Students will learn what type of vegetation to plant around their homes to provide food sources and cover and nesting materials used by birds will also be discussed. Although this course deals primarily with attracting birds to your garden, other wildlife will be covered as well.

**Instructor:** Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She is also an avid birder.

**Fee:** \$16 members/\$17.50 non-members

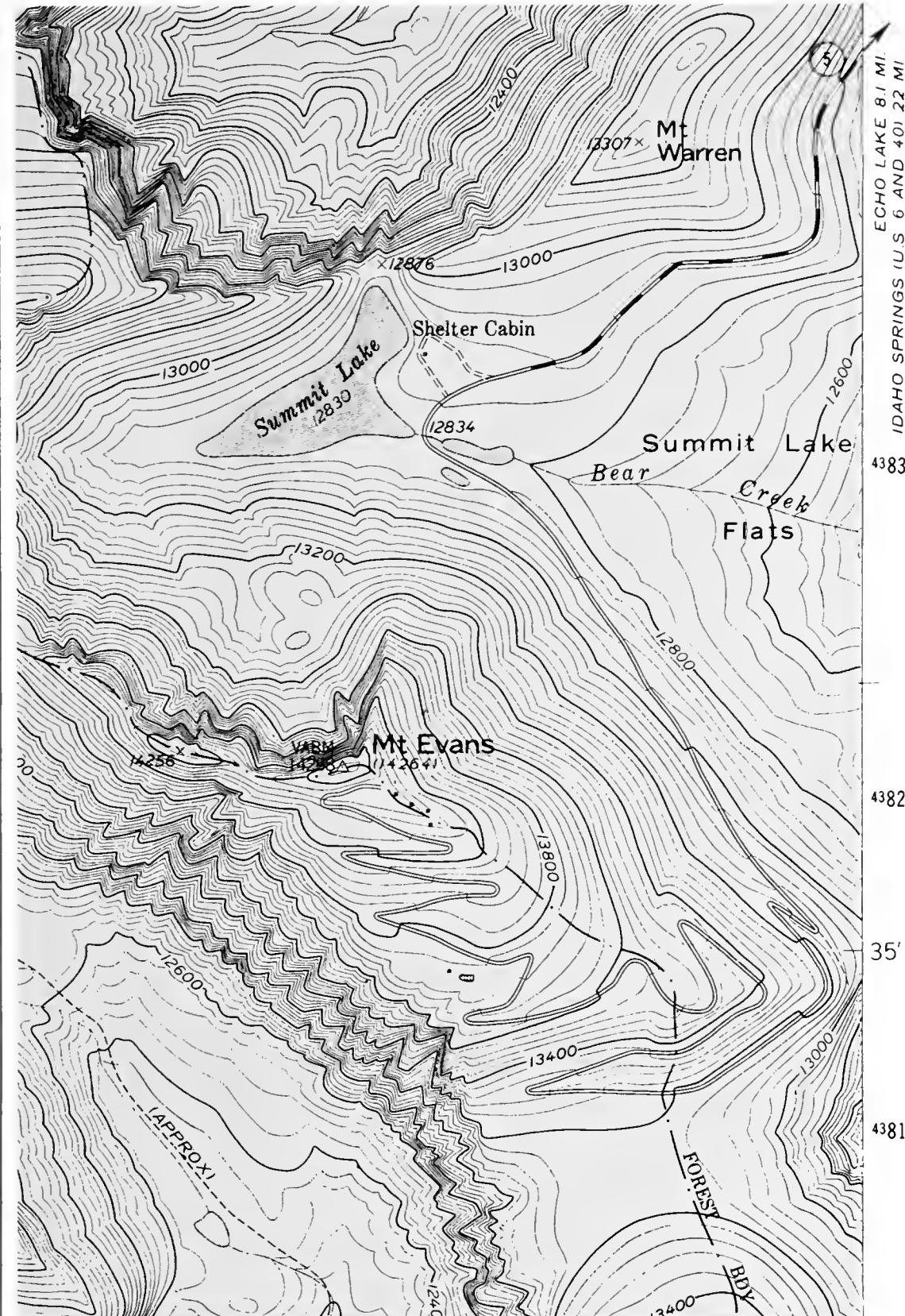
## Map and Compass for Beginners

Wednesdays, November 6, 13, 20

(three sessions)

7 to 9:30 p.m. Classroom B

This course will be useful to both hikers and casual botanizers who are anxious to explore the mountains on their own without participating in a



field trip. In this introduction to maps and their use, students will become familiar with the various types of maps including topographic maps. Using the Mount Evans quadrangle sheet as an example, students will resolve exercises and problems with other class members to sharpen their route-finding skills.

This informal approach to a complicated subject will include ample time for discussion.

**Instructor:** Bob Heapes is a well-known field trip leader and naturalist. During his 25 years as a National Ski Patrolman, he taught classes in survival, winter awareness and ski mountaineering to hundreds of people in groups that range from the Campfire Girls to the 87th Mountain Infantry.

**Fee:** \$33 members/\$36 non-members (includes \$3 for materials).

**Limit:** 16

## Beginning Bonsai

Thursday, October 24, 31,

November 7

(three sessions)

7:30 to 10 p.m. Classroom B

This introductory course will cover the historical and cultural techniques of bonsai, the art of creating dwarf trees and shrubs. Instruction on styling, training, potting and general care of bonsai in Colorado will be included.

Each student will take a completed bonsai home. All materials including a text will be provided.

**Instructors:** Keith Jeppson, past president of Rocky Mountain Bonsai Society, is an experienced bonsai hobbyist of 13 years. Harold Sasaki is a commercial bonsai grower, and an experienced bonsai hobbyist of 15 years.

**Fee:** \$47 members/\$52 non-members (includes a \$17 materials fee).

**Limit:** 20



## 8 Beginning Wheat Weaving

Wednesdays, October 30,

November 6, 13, 20

(four sessions) Classroom B

Section I: 10 a.m. to noon

Classroom B

Section II: 7 to 9 p.m.

DBG's Morrison Center  
which is located at 2320  
E. 11th Avenue; the  
entrance is on 11th  
Avenue.

Please indicate your section on the registration form.



Wheat weavings  
by instructor  
Maureen  
McGowan

Wheat weaving, also known as corn dolly plaiting or straw decoration work, is a centuries-old craft that is practiced in almost all of the grain-producing countries. In this series of workshops you will learn how to clean and work with wheat. Various wheat weaving techniques will be taught to complete harvest wreaths, mordifords, Welsh fans, and other unique decorations.

**Instructor:** Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

**Fee:** \$40 members/\$44 non-members (includes an \$8 materials fee).

**Limit:** 15

## Advanced Christmas Ornaments from Straw and Wheat

Saturday, November 23

10 a.m. to 3:30 p.m. Classroom B

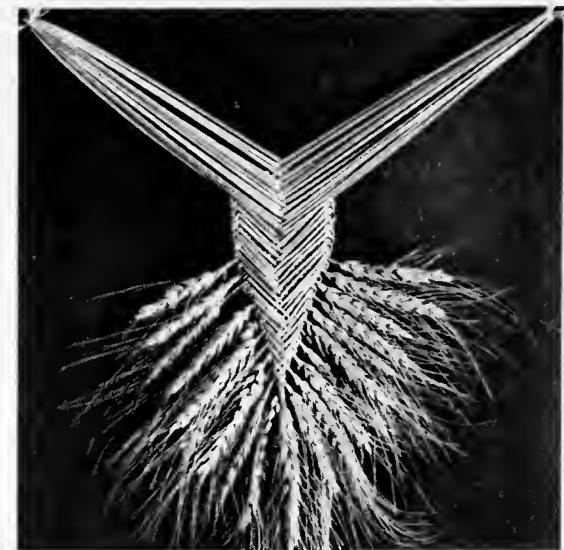
This workshop is for students who have attended any of the straw or wheat classes offered at Denver Botanic Gardens. New techniques of braiding and plaiting will be taught and participants can expect to complete five or six different ornaments for their holiday tree.

Projects include an angel, bell and a five-pointed star.

Please bring a ruler, scissors and a sack lunch to class.

**Instructor:** Maureen McGowan

**Fee:** \$25.50 members/\$28 non-members (includes a \$5.50 materials fee). **Limit:** 15



## Christmas Ornaments from Straw and Wheat

(one session)

Section I: Saturday, November 9

Section II: Thursday, November 21

Section III: Saturday, December 7

10 a.m. to 3:30 p.m. Classroom B

Please indicate your section on the registration form.

Come and learn how to make ornaments from straw and wheat, a craft many Scandinavians do each winter for the holiday season. You will make snowflakes, wreaths, horses, angels and various other unusual tree ornaments. The fee includes wheat for the six or seven ornaments that will be made in class as well as some to take home for others.



**Instructor:** Angela Overy received her National Diploma of Design from London University, England and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her lectures and classes.

**Fee:** \$29 members/\$32 non-members (includes a \$5 materials fee).

**Limit:** 20

Please bring a ruler, scissors and a sack lunch to class.

**Instructor:** Maureen McGowan

**Fee:** \$25.50 members/\$28 non-members (includes a \$5.50 materials fee).

**Limit:** 15

## Basketry Techniques

Tuesdays, October 1, 8, 15, 22, 29

(five sessions) Morrison Center

Section I: 12:30 to 4 p.m. except  
October 1 when the class  
meets until 4:30 p.m.

Section II: 6:30 to 10 p.m. except  
October 1 when the class  
begins at 6 p.m.

Please indicate your section on the  
registration form.



Learn the traditional Appalachian egg basket and some of its variations. The gracefully-shaped baskets originated in Scotland and came to America with the Highland settlers. Students will learn this rib and split technique in a variety of shapes and can expect to complete one basket each session.

Please bring sandpaper, a jack-knife or pocket knife, an awl, knitting needle, or very large nail, spring-type clothespins, an old towel, and kitchen or pruning shears.

**Instructor:** Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

**Fee:** \$95 members/\$105 non-members (includes a \$35 materials fee for the construction of five baskets).

**Limit:** 10

## Basketry Workshop: Round Spoke and Split Basket

Saturday, October 26  
(one session)  
9 a.m. to 4 p.m. Morrison Center

Learn how to make a traditional Appalachian spoke and split basket in this one-day workshop. In it, a series of flat splits radiate outward from the center of the basket's

## Natural Basketry

Thursdays, October 3, 10, 17, 24, 31

(five sessions) Morrison Center

Section I: 12:30 to 4 p.m. except  
October 3 when the class  
meets until 4:30 p.m.

Section II: 6:30 to 10 p.m. except for  
October 3 when the class  
begins at 6 p.m.

Please indicate your section on the  
registration form.

9

*Basketry  
instructor  
Robin Taylor  
Daugherty*

bottom. As it is worked upward, it can take a variety of shapes, all of them round.

No previous experience is necessary and students can expect to complete a basket 11 inches across and 12 inches tall (includes handle). Please bring sandpaper, a jackknife or pocket knife, an awl, knitting needle or very large nail, spring-type clothespins, an old towel, kitchen or pruning shears, and a sack lunch.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$28 members/\$31 non-members (includes \$8 for materials).

**Limit:** 10

When incorporated into baskets, locally gathered plant materials create wonderful textures and visual excitement. Learn the specifics of collecting cattails, grapevines, iris leaves, bullrushes, and bark and add them to the four baskets each student will construct.

Please bring sandpaper, a jack-knife or pocket knife, an awl, knitting needle, or very large nail, spring-type clothespins, an old towel, and kitchen or pruning shears.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$88 members/\$97 non-members (includes \$28 for the construction of four baskets)

**Limit:** 10

## "Just for Kids" Fall Program

Children can discover some of the many wonders of the plant kingdom in DBG's "Just for Kids" fall program. Interesting activities abound: create musical instruments from branches and gourds, make apple people puppets, learn why mushrooms often grow in a ring, see how chocolate is made from cacao and observe carnivorous plants in action.

Although classes are filling rapidly, spaces still remain in many courses, particularly for older children. Separate sections are scheduled for 5-7 year-olds and 8-11 year-olds. Each course is limited to 12 students so parents are encouraged to call Education Assistant Carol Knepp at 575-3751, extension 20, to check availability.

The October schedule of "Just for Kids" courses was published in the September issue of the *Green Thumb News* and interested persons may request additional copies by calling the Education Department. Please note that pre-registration is necessary.

The October schedule is as follows:

- Oct. 1, 8, Sweet Peas  
15, 22
- Oct. 5 Apple Bobs
- Oct. 12 The Chocolate Factory
- Oct. 19 The Botanic Big Band
- Oct. 21 Munch, Crunch
- Oct. 22 Munch, Crunch
- Oct. 26 The Fairy Ring
- Oct. 27 The Fairy Ring
- Oct. 28 Pumpkin People
- Oct. 29 Pumpkin People
- Oct. 30 Pumpkin People

©1985  
Jo Duranceau Cannon

Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

### Sweet Peas

Tuesdays, October 1, 8, 15, 22  
(four sessions) Classroom A  
Section I: 10 a.m. to noon  
Section II: 1 to 3 p.m.

For children of ages 3-5 and a parent

Please indicate your section on the registration form.

Parents and pre-school children, ages 3-5, can join us in a sunlit exploration of the wonderful world of seeds. See how seeds travel on the wind, float on oceans, and even hitch a ride. See the shapes of seeds from jungles to deserts, including the bird of paradise seed with its bright orange tuft.

Listen to the fairy story of *The Princess and the Pea*. Create a sweet pea sunbonnet, seed jewels to adorn and sparkle, and make seed clay prints.

**Instructor:** Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

**Fee:** \$25 members/\$27.50 non-members (class fee covers a child and one parent)

**Limit:** 12

### Sweet Peas: Tender Shoots

Tuesdays, November 5, 12, 19, 26  
(four sessions) Classroom A  
Section I: 10 a.m. to noon  
Section II: 1 to 3 p.m.  
For children of ages 3-5 and a parent.

Please indicate your section on the registration form.

Parents and pre-school children, ages 3-5, will explore the magic of sprouting seeds in this second series of Sweet Peas workshops. See how the seeds from forests and gardens sprout to become flowers and trees. Listen to Jack's story of climbing a very long shoot to search for a bag of gold. Learn how tender shoots follow the sun's beckoning.

Discover how the arrangement of leaves on a tender shoot divides the plant world. Create a sweet pea banner, make a Tender Shoots first edition folding book, and decorate a plant container with sweet pea blossoms.

**Instructor:** Jo Duranceau Cannon

**Fee:** \$25 members/\$27.50 non-members (class fee covers a child and one parent)

**Limit:** 12

1984 Pumpkin People students



### Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No

## Gardening Tips for October

Now that the year has begun to wind down, more thought should be given to the care of your perennials and their preparation for the winter months ahead. Of course we are discussing the non-persistent, herbaceous types that annually die down. A few exceptions are the candytuft (*Iberis*), goldentuft alyssum (*Aurinia*), lavender cotton (*Santolina*), bergenia and some artemisias which do not die down and should not be cut to the ground. These typically retain some of their stalks, or in the case of bergenia, their foliage throughout the winter.

An early consideration for when you go out to tidy your garden and complete the perennial season should be the use of material available for dried flower arrangements. Heads of *Achillea* (yarrow) and those of *Echinops* (globe thistles) make fine dried subjects. Additionally, harvest some of the decorative seed heads of the blackberry lily, ozark spider drop and perhaps the leftover stalks of the gas plant. Without a doubt some of the grasses fall into this category so don't be afraid to try anything that looks useful—you can't lose as it is going to be thrown away or composted anyway. Imagine peony leaves in an Oriental style arrangement.

Now that you have saved what you need prior to the first killing frost, the next step is to cut down all frosted material approximately two inches from the soil leaving apparent clumps of belamcanda, iris, kniphofia and daylilies that are persistent. Principal plants to be cut down include phlox (border types), asters, campanulas, veronicas and many of the composites or daisies. Remove the material from the bed, and if it is clean and free of fungi or insects, it can be cut up and composted. Monarda and phlox typically carry powdery mildew and this material should be destroyed. You may also wish to dispose of seed heads capable of creating a weed problem in the spring such as globe thistle, sea holly and some types of rudbeckia or cone flower. While cutting back, do a final tidying up of old leaves and occasional weeds.

With Denver's heavy soils your perennial bed may be as hard as concrete by this time due to all the trampling. Lightly cultivate your garden with a pitchfork to allow winter moisture an opportunity to penetrate the soil. Your old plant stakes should be removed, cleaned and stored for this season if in suitable condition. Keep in mind that heavy watering may be required to protect them through our occasional dry winters. This is not uncommon in Colorado, especially for trees and shrubs, if the weather is extremely dry. During the middle of the 1984/85 winter season some watering was required on southern exposures where there was a prolonged lack of snow cover.

As opposed to a summer mulch which is put on the ground between plants, winter mulches are done with light, open material across the crowns and clumps. Not every type of material is suitable and the time of application and removal is critical. We can use old Christmas trees, pine branches or even straw. Hay and leaves tend to mat down and are not effective insulators. Wait until the ground is frozen before applying your mulch as the principle of application is to prevent rapid fluctuations of temperature at soil level. This may not be necessary until January, and with removal in April, the winter mulching season is short.

Take your branches and place them lightly over the plants you wish to mulch, in a crisscross fashion two layers thick. This will prevent the sun from penetrating the crown of the plants and consequently temperatures will be lower and more stable. These light mulches will allow air and available moisture to penetrate the plant. You should leave ground coverings such as creeping phlox uncovered.

When spring starts to take hold and shoots finally begin to appear on your plants, including early spring bulbs, remove half of your mulch material. A few days later take the remainder off. This process will allow the shoots to become acclimatized before being exposed to full sunlight.

Another winter problem may be heaving or lifting by frost expansion and contraction in the soil, especially critical to plants put in during

the fall. Firm such plants back into the ground to prevent desiccation of exposed roots. In our area, spring planting is generally preferred. By early spring the danger of heavy frosts will be past thus diminishing the problem of heaving.



Winter may not be that long if you use some of the early bulbs such as crocus and dwarf iris among your plantings. These are true perennials, although not always considered as such. Yet, among the clean and tidy winter border, they are the first surprise of the new year and indicate that spring is well on its way.

Andrew Pierce  
Assistant Director of  
Denver Botanic Gardens

Visitor Tom Owen enjoys smelling the yarrow.

C

A

L

E

N

D

A

R

OCTOBER

**Regular Meetings  
of Plant Societies**

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

S

M

T

W

T

F

S

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

**Coming Next Month**November 1  
Tempel  
Wildflower  
LectureNovember 5  
Sweet Peas:  
Tender ShootsNovember 6  
Map and  
Compass for  
Beginners

Associates'

Annual Lunch-

eon, Pumpkin

People

Beginning

Wheat Weaving

November 9  
Christmas  
Ornaments  
from Straw and  
WheatNovember 12  
Design Your  
Own Botanical  
CardsNovember 21  
ChristmasOrnaments from  
Straw and WheatNovember  
22-23  
Annual  
Holiday Gift  
Shop SaleNovember 23  
Advanced  
Christmas  
Ornaments  
from Straw and  
Wheat**Denver Botanic Gardens, Inc.**909 York Street  
Denver, Colorado 80206  
303-575-3751

Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

**October 1985****TIME VALUE**

Address correction requested



Green

Thumb

N E

Denver Botanic Gardens

November 1985

Number 85-11



W S

## Annual Holiday Gift Sale—November 22 and 23



Songs from imported music boxes and precision-tuned wind chimes will blend with the fragrances of pot-pourri and freshly baked herb bread at DBG's Annual Holiday Gift Shop Sale. Between 10 a.m. and 4:30 p.m. on Friday and Saturday, November 22 and 23, shoppers may usher in the holiday season by purchasing unusual presents for family and friends.

Volunteers have spent many hours preparing the traditional mixed herb and tarragon vinegars. Some herbal surprises are also anticipated from them this year. Basil and garlic have been combined to make a delicious pesto sauce—the perfect accompaniment to pasta. Or, try a dollop to enliven vegetable and minestrone soups. Created from their home gardens will be an assortment of country kitchen herb offerings including jellies and breads.

Anticipate the return of some old favorites: the well-known herb salts and dill-dip mix. Look for these among the potpourri items.

Potpourri is available in more than one delightful fragrance; 18 distinct mixtures in all fill tranquility pillows and dainty sachets. Each month volunteers gather to create enticing packages of fragrances using sought-after ingredients and well-guarded recipes. Beginning with the collection of flowers and herbs, they carefully prepare and dry their ingredients under the guidance of experienced potpourri "chefs."

These are then mixed with special oils and are packaged in assorted ways. These volunteers amaze the "all-thumbs" individuals with their delicate and detailed needlework.

*Inside:*

*Classes for Adults*  
*page 5*

*continued on page 2*

## 2 | Holiday Gift Sale (cont.)

Shoppers are further tempted to create their own blends by the wide variety of petals, herbs, spices, oils, and even jars available.

Volunteers from "Around the Seasons" provide the incredible assortment of everlastings that shoppers of the Annual Holiday Gift Shop Sale have come to expect. They maintain our Cutting Garden and carefully select, at just the right time of the growing season, flowers, grasses and seed pods for drying.



One-of-a-kind  
Spanish vine  
wreaths

Garages, basements and all available dark corners have been filled over and over this summer with bunches of their drying plant material.

Blue salvia and golden yarrow, as well as seed pods, cones and grasses combine with many other natural materials to provide a bountiful autumn harvest booth. Consider purchasing an assortment of these and a pretty basket to make your own fall arrangement.

Each September the Gift Shop volunteers place special orders for holiday items for these two days. With hundreds of intriguing gift items to select from, the best advice is to come early and see what treasures can be discovered.

Collector's items abound in every section of the sale. From Prescott, Arizona, come carved ebony birds. Individual and family groups of intricately detailed nuthatches, hummingbirds, quail and seagulls have been mounted on mesquite burl bases. Gorham collections will be represented by nature sculptures of birds in exquisite colors.

Definitely not to be outdone is the collection of jewelry available at the sale. New this year are one-of-a-kind

designs of Venetian glass beads and strands of Czechoslovakian glass beads. Take time to look closely at the detailed work in each bead. Semi-precious stones can also be found in unique designs. The shop is justly proud of its display which includes amber, jade, onyx and coral.

Many decorator and Ikebana items have found their way to DBG from the Orient. A large, active interest in Asian cultures helps



maintain a good selection of their art work. Hand-painted vases and jars will be appreciated for their fine craftsmanship. An impressive collection of Ikebana containers will enhance the simplicity and balance of your arrangements. These well-crafted accessories are meant to be treasured for generations.

Pot-perchers, plant hangers and gardening books are all to be found at the sale. Enjoy the sounds of

### Tributes

- In memory of R. Scott Brittain  
E. Sydney Glick  
Herbert & Beatrice Jones  
Barbara Moore Rumsey  
Staff of Denver Botanic Gardens  
**In memory of James Clagett**  
Denver Botanic Gardens Guild  
**In memory of Michael Groves**  
Mr. & Mrs. Robert S. Appel  
**In memory of Lois T. Lundquist**  
David & Lois Ferguson  
**In memory of Dr. Gordon W. Murray**  
Elmira J. Elliott  
**In memory of Colvin Patterson**  
Dr. & Mrs. Rodney H. Jones  
**In memory of Edwin Sikes**  
Margaret Wallace  
**In memory of Diana Van Schaack**  
Mr. & Mrs. J. Churchill Owen  
Barbara Moore Rumsey  
**In memory of Dr. William H. Wierman**  
James E. Stokes

fine-tuned wind chimes in your garden along with a sculpture from the weather-resistant Isabel Bloom collection.

Children will delight over the array of Beatrix Potter cards, books and figurines. New, is a billowing hanger made of colorful silk cords that stream below it in the slightest of breezes. An enchanting selection of little stocking stuffers that whirl and jump has proven to be hits with children of all ages.

Many tree ornaments will be available but the ones most sought after are undoubtedly the hand-made ornaments from last year's DBG Christmas tree. Savvy collectors from throughout the Denver area are slowly developing beautiful collections of these momentos.

DBG annually offers a wealth of unusual holiday gift items. Amid the excitement of the sale, be sure to keep in mind that a gift for family or friends purchased at the sale is a gift to the Gardens.

### Herald the Season— December 15

Members take note. Holiday festivities at the Gardens will begin with "Herald the Season" on Sunday, December 15 from 4 to 6 p.m. "Wizard Oil Combination," a men's choral group, will be providing the entertainment. Plan to join us in this annual event.

### Green Thumb News Number 85—11 November 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than October 18 for December, November 20 for January, and December 20 for February.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.

# L I B R A R Y

Helen Fowler Library  
Volume 8, No. 5  
November 1985  
Guest Editor,  
1985 Summer Intern  
Becky Thayer  
Librarian:  
Solange Gignac

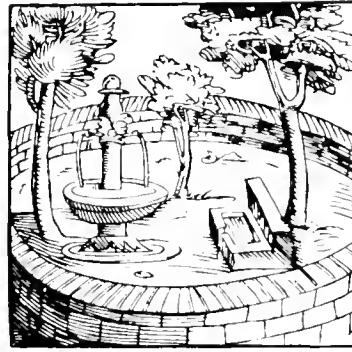
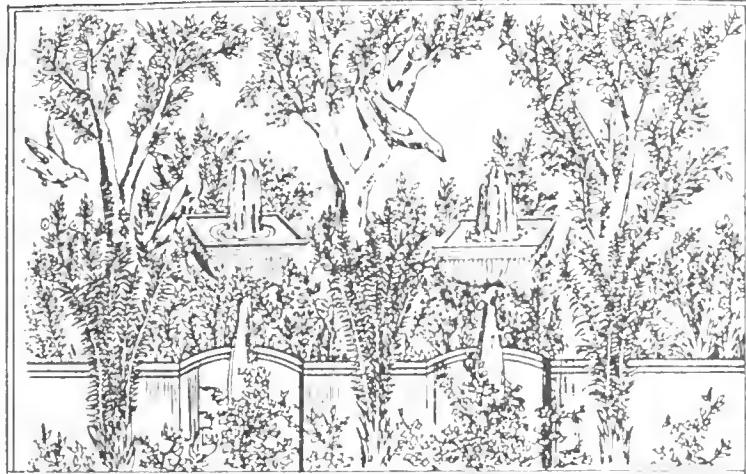
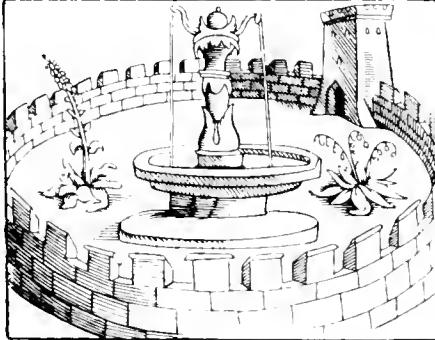
## *The House of Boughs: A sourcebook of garden designs, structures, and suppliers*

By Elizabeth Wilkinson and Marjorie Henderson. Viking Press, New York, New York, 1985. \$35.00. SB 472 W4 1985.

This handsome volume is an overview of the many forms gardens have assumed through the ages. Although the book contains a brief historical introduction, its main

Rome, Persia and the Orient right up through present-day American, European and Asian gardens are represented. Actual plant materials for gardening are not suggested except in the cases where they are used as architectural components.

Chock-full of color plates, prints, drawings, illustrations and photos, the encyclopedia is delightfully illustrated. Unfortunately, the illustrations are not clearly labeled or defined and often lead to confusion.



emphasis is not gardening history but the compilation of designs and structures utilized in various gardens.

After the historical preface, information is arranged topically and alphabetically. Topics include walls, gazebos, furniture, fencing, topiary and bed designs, to name a few. Ancient gardens from Greece,

If a gardener wants a short description of a garden structure or design, or perhaps some new design ideas, this encyclopedia is beneficial. For more detailed information on particular facets of gardening, the bibliography will help to direct one to more in-depth sources. A handy list of garden suppliers is also included for future reference.



## THE REVIEWER

Becky Thayer—1985 Summer Intern

## Farewell to Jean Williams

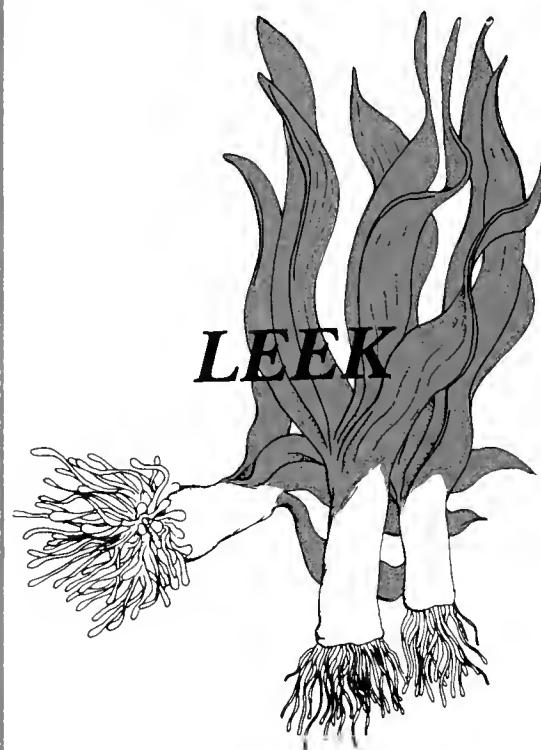
Many thanks to Jean Williams who has edited Library Lines since March 1983 and is moving to California. She will be missed.

## Fancy Fruits and Extraordinary Vegetables: A Guide to Selecting, Storing and Preparing

By Sandra Conrad Strauss.  
Hastings House Publishers, New York, New York, 1984. \$14.95. TX 811 S8 1984.

This new book is an exciting introduction to an exploration of unusual fruits and vegetables which are becoming common market produce. No longer will cooks be intimidated by the unfamiliar products now gaining popularity in the U.S.

Each section covers a different fruit or vegetable. These sections are arranged alphabetically from artichoke to watercress. Other exotic foods include Oriental vegetables like bok choy and snow peas, tropical fruits like mango, coconut and papaya, and native American vegetables like prickly pear and Jerusalem artichokes.



Ms. Strauss provides tips about the proper selection, care, availability and preparation of these exceptional fruits and vegetables. She also gives delightful anecdotes of the history of the various foods and the evolution of their common names. Nutritional and botanical information is present, although it is generally vague and lacks clarity.

The highlights of this cookbook are the tantalizing recipes following the introductions. Oriental, Mexican and European culinary secrets enhance flavorful soup, salad, and vegetable side dish, entree, beverage and dessert recipes. There is a healthy blend of vegetarian and non-vegetarian recipes, and also some low-sodium dishes. All the dishes are simple enough for a novice cook, but the tastes are so enticing an accomplished cook will also enjoy them.

## CREAMY CACTUS COOLER

4 prickly pears  
1 banana

½ cup evaporated milk  
6 to 8 ice cubes

Peel the prickly pears. In a blender or food processor, purée pears and strain to remove seeds. Combine puréed pears, banana, evaporated milk and ice cubes; blend until smooth. Pour into glasses.  
Makes 2 servings

These innovative recipes, combined with the extraordinary new produce, will tempt cooks to expand their recipe files to include these fancy fruits and unusual vegetables.

## Gardening In The Upper Midwest, Second Edition

By Leon C. Snyder. University of Minnesota Press, Minneapolis, 1985. \$13.95. SB 453.2 M6 S5 1985.

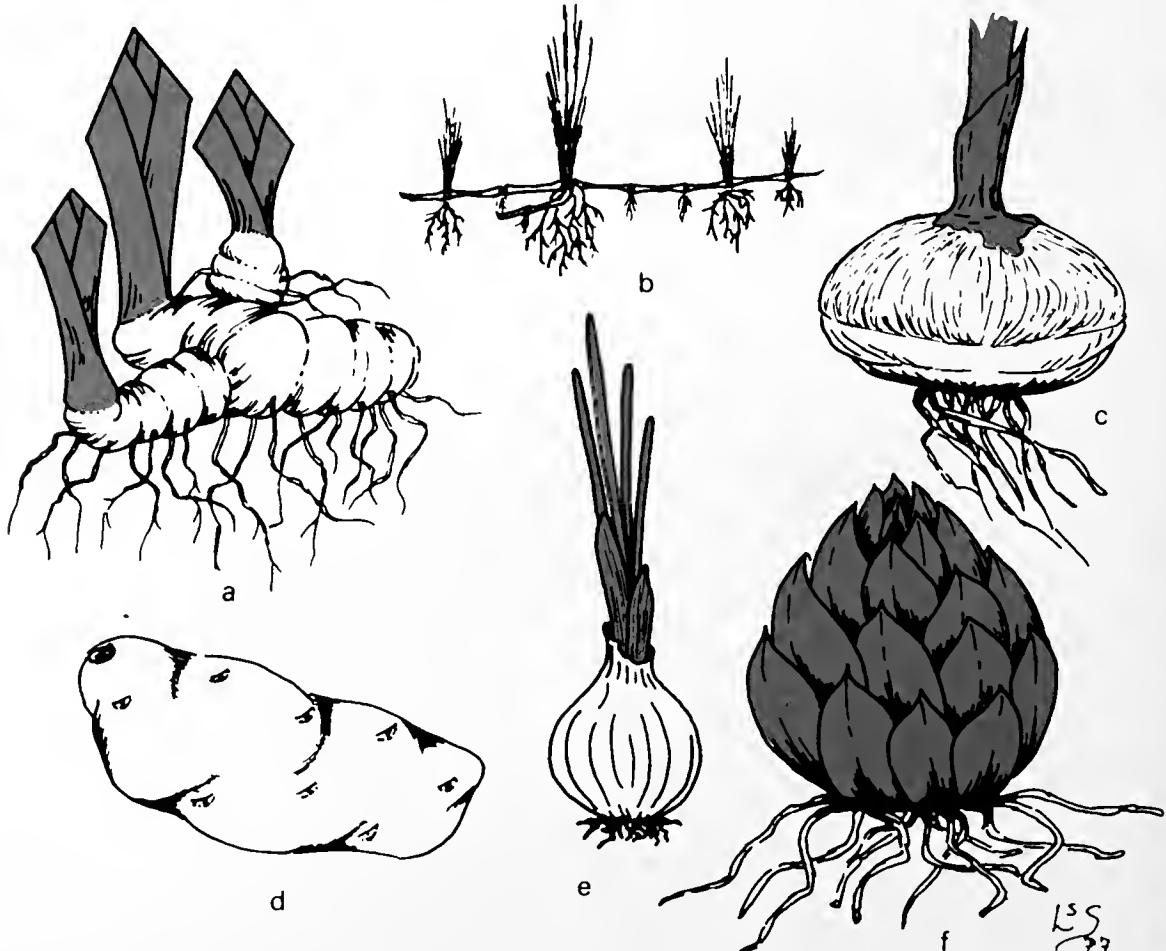
Leon Snyder has written this book in order to address the specialized problems gardeners in the Upper Midwest face: severe winters, alkaline soils, unpredictable rains and a short growing season. With the addition of a very arid climate, these are also problems which gardeners in Colorado face. Because of these similarities, this book will be applicable here too.

Basically this work is an updated version of the 1978 edition with a few additions. Mr. Snyder has included a new section on vegetable growing and expanded the chapter on home fruit production. The first six chapters remain virtually unchanged as a botany primer. The explanations are clear and concise with good illustrations. He also

discusses soils, pest management, pruning and trimming of plants. The last 10 chapters cover many aspects of gardening. Included are landscape design, lawn care, vines, evergreens, deciduous trees, annuals, perennials, bulbs, roses, shrubs and ground covers. These chapters contain information on the selection and care of various plants proven to be hardy in the Upper Midwest, plus some general gardening tips and suggestions.

Easy to read and understand, this book will answer many questions about how to cope with problems such as dieback, flower buds that are not hardy, winter burn, soil alkalinity and sunscald. It will also suggest choices for pleasing arrangements and complementary plants. *Gardening in the Upper Midwest* is a good, solid reference for any gardener faced with impoverished soils, severe temperature changes and short growing seasons.

Becky Thayer



# CLASSES

Fall  
1985

Denver Botanic Gardens

## Education Department

### Design Your Own Botanical Cards

Tuesdays, November 12, 19, 26  
(three sessions)

9:30 to 11:30 a.m. Classroom B

Have you ever longed to design and send handmade holiday or note cards? This is your chance to get organized and do just that.

In this class, students will draw holiday greens, cones and flowers from the Gardens on your own Christmas cards. Please bring rulers, erasers, practice paper, pens, pencils, watercolors and brushes, colored pencils and/or markers for your prettiest and most personal cards ever. Beginning and advanced students will be provided with a

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

**Instructor:** Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College, and Colorado Women's College.

**Fee:** \$40 members/\$44 non-members

**Limit:** 20



Provender basket by Robin Taylor Daugherty

dozen cards and envelopes to illustrate. Instructions will be given to those students who wish to have their designs printed.

**Instructor:** Angela Overy received her National Diploma of Design from London University, England and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her lectures and classes.

**Fee:** \$29 members/\$32 non-members (includes a \$5 materials fee).

**Limit:** 20

### Watercolor and Mixed Media Painting

Wednesdays, November 20, 27,  
December 4, 11, 18  
(five sessions)

9:30 to 11:30 a.m. Classroom B

Have you ever longed to design and send handmade holiday or note cards? This is your chance to get organized and do just that.

In this class, students will draw holiday greens, cones and flowers from the Gardens on your own Christmas cards. Please bring rulers, erasers, practice paper, pens, pencils, watercolors and brushes, colored pencils and/or markers for your prettiest and most personal cards ever. Beginning and advanced students will be provided with a

### Map and Compass for Beginners

Wednesdays, November 6, 13, 20  
(three sessions)

7 to 9:30 p.m. Classroom B

This course will be useful to both hikers and casual botanizers who are anxious to explore the mountains on their own without participating in a field trip. In this introduction to maps and their use, students will become familiar with the various types of maps including topographic maps. Using the Mount Evans quadrangle sheet as an example, students will resolve exercises and problems with other class members to sharpen their route-finding skills.

This informal approach to a complicated subject will include ample time for discussion.

**Instructor:** Bob Heapes is a well-known field trip leader and naturalist. During his 25 years as a National Ski Patrolman, he taught

classes in survival, winter awareness and ski mountaineering to hundreds of people in groups that range from the Campfire Girls to the 87th Mountain Infantry.

**Fee:** \$33 members/\$36 non-members (includes \$3 for materials).

**Limit:** 16

### Planting to Attract Wildlife

Thursdays, December 5, 12

(two sessions)

7 to 9 p.m. Classroom C

Even the urban dweller can attract wildlife to his yard. If the thought of luring cedar waxwings or cottontail rabbits appeals to you, this two-session course will provide the necessary details. Students will learn what type of vegetation to plant around their homes to provide food sources and cover and nesting materials used by birds will also be discussed. Although this course deals primarily with attracting birds to your garden, other wildlife will be covered as well.

**Instructor:** Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She is also an avid birder.

**Fee:** \$16 members/\$17.50 non-members

### Designing Your Home Landscape

Saturdays, November 16, 23

(two sessions)

1 to 5 p.m. Classroom B

Your home landscape should have a unique character and suit your needs and desires. Planning now means you could enjoy a beautiful new landscape next summer!

The two classes consist of slide lectures, demonstrations, discussions, and local resources. Topics include design procedures and principles, Front Range ecology, historic landscapes, irrigation, paving, and structures. This course is for those with urban or suburban homes as well as large semi-rural properties. The problems of new or "boring landscapes" and those in need of renewal will all be covered.

**Instructor:** Janet M. Caniglia has practiced landscape architecture for six years in the areas of residential and commercial design, environmental planning, and community design. She has taught numerous classes in landscape design.

**Fee:** \$32 members/\$35 non-members

**Limit:** 15



## Christmas Ornaments from Straw and Wheat

(one session)

**Section I:** Saturday, November 9

**Section II:** Thursday, November 21

**Section III:** Saturday, December 7

10 a.m. to 3:30 p.m. Classroom B

Please indicate your section on the registration form.

Come and learn how to make ornaments from straw and wheat, a craft many Scandinavians do each winter for the holiday season. You will make snowflakes, wreaths, horses, angels and various other unusual tree ornaments. The fee includes wheat for the six or seven ornaments that will be made in class as well as some to take home for others.

Please bring a ruler, scissors and a sack lunch to class.

**Instructor:** Maureen McGowan

**Fee:** \$25.50 members/\$28 non-members (includes a \$5.50 materials fee).

**Limit:** 15

## Advanced Christmas Ornaments from Straw and Wheat

**Saturday, November 23**

10 a.m. to 3:30 p.m. Classroom B

This workshop is for students who have attended any of the straw or wheat classes offered at Denver Botanic Gardens. New techniques of braiding and plaiting will be taught and participants can expect to complete five or six different ornaments for their holiday tree. Projects include an angel, bell and a five-pointed star.

Please bring a ruler, scissors and a sack lunch to class.

**Instructor:** Maureen McGowan

**Fee:** \$25.50 members/\$28 non-members (includes a \$5.50 materials fee).

**Limit:** 15

**Denver Botanic Gardens  
909 York Street  
Denver, Colorado 80206**

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

## Basketry Workshop: Provender Basket

(one session)

**Section I:** Wednesday, November 13

**Section II:** Saturday, November 16

9 a.m. to 5 p.m. DBG's Morrison Center

Please indicate your section on the registration form.

Learn to make a provender basket. This graceful, traditional shape holds cut flowers or herbs without bending the stems. It is also lovely as a centerpiece full of flowers, fruits, gourds or even pine cones and holiday greens. Of spoked construction with a sturdy handle, this basket will be completed during the one-day workshop.

Please bring an old towel, kitchen or pruning shears and a sack lunch.

**Instructor:** Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making and basketry throughout Colorado and her work is exhibited widely.

**Fee:** \$34 members/\$37 non-members (includes \$10 for materials)

**Limit:** 10

## Holiday Ornaments: Wooly Sheep

**Wednesday, December 4**

(one session)

**Section I:** 2 to 4 p.m.

**Section II:** 6:30 to 8:30 p.m.

**DBG's Morrison Center**

Please indicate your section on the registration form.

Construct a flock of rams, lambs and ewes to decorate Christmas trees, manger scenes or to graze among holiday greens. These fluffy ornaments are easy to make from natural materials and participants can expect to make up to ten.

Please bring wire cutters and something to carry your flock home in.

**Instructor:** Robin Taylor Daugherty

**Fee:** \$16 members/\$17.50 non-members (includes \$8 for materials)

**Limit:** 10

*Wooly sheep  
by Robin  
Taylor  
Daugherty*



## Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No



*Mulching roses with pine needles.*

## Great Getaways: The Alps

Tour the Alps with Edward Connors, the president of the DBG Board of Trustees, and Panayoti Kelaidis, curator of our Rock Alpine Garden. Visit Austria, Switzerland and Italy from June 7-24, 1986 and consider an optional one-week extension to northern Italy.

The formal gardens of Villa Taranto, Carlotta and Melzi are a start to this inspiring tour of three countries. Travel across the Italian border into Switzerland via the Simplon Pass to botanize alpines. Here, Panayoti's expertise will be put to good use. Many other flowers will be seen in the lower elevations of Grindelwalk, Interlaken, Pontresina and St. Moritz.

In Austria, near Innsbruck, a plant lover's paradise will again be discovered. Then, off over the Brenner Pass into Italy to picnic among the Dolomite Mountains with its unique flora.

Padua, the first botanic garden of the Western world, is among the many towns in northern Italy more noted for art than gardens. An optional tour extension of one week can take you to Florence, Lucia, Pisa and Milan and the art they offer and to the gardens of Collodi and Sir Harold Actons.

Call Assistant Director Andrew Pierce at the Gardens, 575-3751, for more details.

## Gardening Tips for November

Gardeners often times feel the first killing frost is the time to "shut down" the gardening season, but November and December are more apt to be the months that close the year and lay the groundwork for the successful growing season that follows.

At this time of year we hope for snow cover that will last until spring. But of course, that is rarely the case. In general, snow is an excellent ground cover, but not terribly reliable. Therefore, we must imitate nature and adopt the methods of this natural process. In the grasslands, as well as the forests, plant debris falls, dies and decays. This not only protects the roots, but also replenishes the nutrient supply in the soil.

In the landscape, we as gardeners provide this cover. Mulch is an adaptation of a natural process and in general is a blanket of material placed around plants. The reasons are many. It prevents erosion of the soil, keeps weeds to a minimum, conserves moisture, moderates temperatures and prevents crusting and packing of the soil surface.

Winter mulch differs from summer mulch and is used for different reasons. In the summer mulch is used to keep the ground warm, to conserve soil moisture, and

to control weeds. In the winter it is used to keep the ground uniformly frozen.

For many plants, winter injury occurs not in midwinter, but as spring approaches and things begin to thaw. Temperatures fluctuate and snow or rain collects on the roots. There is an alternation of freezing and thawing that heaves shallow-rooted plants out of the soil. These are exposed, they dry out and the plants die.

Rather than after the first frost, it is important to apply mulch after the ground freezes to a depth of one to two inches. If mulch is applied too early, it encourages a haven for mice who feed on the roots, bulbs and/or bark.

Mulch will also modify the effects of drying winds and sun and help reduce the moisture loss from exposed tissues.

The materials used are many. Appropriate mulches for this time of year are evergreen boughs, pine needles, leaves from deciduous trees and shrubs or burlap. Whatever is applied should allow free air circulation and light penetration while discouraging the collection of moisture that may cause root rot.

Gayle Weinstein  
Botanist Horticulturist at  
Denver Botanic Gardens

C	A	L	E	N	D	A	R
S	M	T		W	T	F	S
3	4	5		6		1	2
				Map and Compass for Beginners		Tempel Wild- flower Lecture	
10	11	12		13		14	9
		Design Your Own Botanical Cards		Provender Basket		15	Christmas Ornaments from Straw and Wheat
17	18	19		20		21	16
						Christmas Ornaments from Straw and Wheat	Designing Your Home Landscape, Provender Basket
24	25	26		27		28	23
							29
							30

### Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

### Coming Next Month

December 4      December 15  
Wooly Sheep      Herald the  
Workshop      Season

Denver Botanic Gardens, Inc.  
909 York Street  
Denver, Colorado 80206  
303-575-3751

Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

November 1985

### TIME VALUE

Address correction requested



Green

Thumb

Denver Botanic Gardens

December 1985

Number 85-12



N

E

W

S



## Holiday Happenings

All Gardens' members and their families are invited to celebrate the Christmas holidays with us at "Heralding the Season." This year's event will be held on Sunday, December 15 from 4 to 6 p.m.

Again, Avalonne Kosanke, Fran Morrison and their secretive fellowship of volunteers will have decorated the Lobby Court tree. The unveiling of the Christmas tree at this members' event always begins the holiday season at DBG.

Entertainment by "Wizard Oil Combination," a men's choral group, and refreshments will be provided. Advance reservations for this celebration are not required. Please join us for a truly joyous occasion.

Special holiday activities and extended hours at Denver Botanic Gardens are in the planning stage for December 15 to 24. Listen to KCPR 90.1 FM and watch your newspapers for further information.

Make the Gardens a place to bring your family to enjoy this wonderful season.

## Exploring Chatfield Arboretum

Free workshops will be offered this winter to encourage a new crop of volunteers at DBG's Chatfield Arboretum property west of the Chatfield Reservoir. The Arboretum is a developing extension of the Gardens that needs volunteer support in plant research and in the development of the Kim Sterne Survival Garden. Many other areas of assistance are open including historic research and grounds restoration of the Hildebrand Historic Farm.

*continued on page 4*

Pictured are Dr. William G. Gambill, Jr., Director Emeritus, and Merle M. Moore, Executive Director of Denver Botanic Gardens, with Dr. K. H. Shing, Research Associate and Curator of the fern collection of the National Herbarium, Beijing Botanical Institute, of the People's Republic of China. The photo was taken in Beijing during Dr. Gambill and Director Moore's recent trip to the People's Republic of China.

Our former and present directors were there from October 4 to October 20, at the invitation of the Chinese Academy of Science and Technology and the Botanical Society of China. They were part of a visiting delegation of botanists, horticulturists, landscape architects and park planners invited to share

information on landscape design and maintenance with their Chinese counterparts.

Dr. Shing was a visiting professor in the biology department at the University of Colorado in Denver for the 1981-1982 term. He also worked on verifying the records for our living and preserved fern collections before going on to the Herbarium of the University of Michigan and then returning to China.

A series of up-coming articles in the *Green Thumb Magazine* will highlight the travels of Dr. Gambill and Director Moore in China and their many and varied experiences in meeting with botanical and horticultural counterparts there.



*Dr. William Gambill (left), Dr. Shing (center) and Merle M. Moore at the National Herbarium, Beijing Botanical Institute.*

### Tributes

**In memory of Mrs. Dorothy Mead Davis**  
James E. Stokes  
**In memory of L. Preston Johnson**  
Mr. & Mrs. Ronald L. Hanscom  
Robert L. Keplinger  
Lee Nelson Family  
**In memory of Ida Quentin Mitchell (Lobby Court Fund)**  
Boettcher Foundation  
Rodney S. Davis  
Mr. & Mrs. John Day  
Mr. & Mrs. George D. Fraser  
Ms. E. Sydney Glick  
Ms. Paulene G. Heyer  
Ms. Elaine C. Hodges  
Mrs. Russell (Eleanor) Johnson  
Mrs. Mary Holt Joyce  
Mrs. Thomas B. Knowles

Mr. & Mrs. Harold Kountze, Jr.  
Hover & Lorraine Lentz  
Mr. & Mrs. Edward Lyman  
Mr. & Mrs. William Miskell  
Mr. & Mrs. Peter Neidecker  
Mrs. Kennard P. Perry  
Mr. & Mrs. Allan Phipps  
Mr. & Mrs. F. George Robinson  
Mr. & Mrs. Norman Sample  
Mr. & Mrs. Samuel S. Sherman  
Henry C. Van Schaack III  
Ms. Susan O. Van Schaack  
Mr. & Mrs. George S. Writer  
**In memory of Jayme K. McLean**  
Mr. & Mrs. John R. Doyle  
**In memory of Christena M. Norris**  
Laurie M. Gaylord  
Mr. & Mrs. LaRue McClearey

### 1985 Year End Reminder

We may be facing changes in the tax laws in 1986, so now, at the end of 1985, might be the time to evaluate your charitable giving opportunities. The tradition of sharing is well entrenched as an American institution and is certainly beneficial to your favorite charity.

Non-itemizing taxpayers take special note: 1985 may be the best year for you to make gifts, because you may deduct a full half of your charitable gifts, up to half of your adjusted gross income.

You may give to your favorite charity through gifts of:

- cash
- securities
- life insurance
- real estate
- memorials
- personal property
- business inventory

Be sure to check with your tax advisor before making substantial gifts.



**Green Thumb News**  
Number 85-12 December 1985

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knapp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than November 20 for January, December 20 for February, and January 20 for March.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the  
American Association  
of Museums

## Peonies of Greece: Myth, Science, and Art

A new exhibition from the Smithsonian Institution illustrating the evolution of scientific documentation through the ages will open in DBG's John C. Mitchell II Hall on February 8, where it will be on view through March 16.

The focal point of the show is a set of 12 framed lithographs prepared by Takis Katsoulidis from a numbered edition of *Peonies of Greece* originally painted by botanical artist Niki Goulandris. Working directly from the scientifically correct watercolor paintings of Mrs. Goulandris, Katsoulidis has developed a set of lithographs whose colors are so perfectly balanced that it is difficult to distinguish between the watercolors and the lithographs. Also traveling with the exhibition are two exquisite original watercolor paintings by Mrs. Goulandris.

Twenty-one informative and entertaining panels provide the framework of the exhibition. The text highlights, in short, the peony in Greek mythology; the cultivation and distribution of the peony within Greece and around the world; and the 16th, 17th and 18th century cataloguing of information. Eight encased, dried peonies add texture to the artistic and historical value.

"Peonies of Greece: Myth, Science and Art" is co-sponsored by the Greek National Tourist Organization and the Goulandris Natural History Museum. As with previous exhibits from the Smithsonian Institution, the Gardens eagerly anticipates the arrival of this exhibition.

### Say Happy Holidays With A DBG Gift Membership

Give a year of enjoyment to friends and loved ones on your holiday list.

A Denver Botanic Gardens' membership is one gift that keeps giving—all year.

A monthly newsletter with lists of plant-related classes, a quarterly magazine containing botanical and horticultural information; a library chock-full of horticultural books, magazines, and more; and special events for all members throughout the year are just a few of the benefits your gift will include.

Remember your friends and loved ones in this special way and they will cherish your generosity all year long.



*Paeonia  
mascula* subsp.  
*mascula* from  
"Peonies of  
Greece: Myth,  
Science, and  
Art"



### Give A Special Gift! A Denver Botanic Gardens Membership

Family/Dual	\$30	Senior	\$15
Senior Couple	\$20	Student	\$15
Individual	\$20		

Donor's Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

Recipient's Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Date to Mail Gift Card \_\_\_\_\_

Gift Card to be Signed \_\_\_\_\_

Recipients receive a card informing them of your gift, plus a free plant that may be picked up at the Gardens.

## Exploring Chatfield

*continued from page 1*

Beginning on Thursday, January 9 and ending on March 20, workshops will meet every other Thursday morning from 9:30 to 11:30 a.m. These programs will be held at the Arboretum.

Topics pertinent to the Chatfield area will include: edible plants, bird and animal tracks found at Chatfield Arboretum and winter identification of trees and shrubs. General topics of interest to all gardening enthusiasts will cover propagation and pruning.

A commitment of 40 hours of volunteer service at the Arboretum during the spring and summer of 1986 will qualify participants for these free lectures.

Please pre-register by calling DBG Education Department, 575-3751 extension 20. Additional details and a complete description of workshops will be provided in the January 1986 *Green Thumb News*.

### Great Getaways— We Are Off to the Alps

Come with us to the Alps in June 1986 under the unique guidance of Edward Connors, president of DBG's Board, and Panayoti Kelaidis, curator of the Rock Alpine Garden. Plan to remain in Europe for an optional week to see the art

of northern Italy in towns such as Florence, Lucia, Pisa and Milan.

Plant lovers will see splendors in the high Alps of Switzerland near Interlaken and St. Moritz, in Austria on the magnificent Brenner Pass and at the lower elevation of Innsbruck. Beneath the pass the group will picnic among the Dolomites of Italy.

Later, a visit to Padua will allow a peek into history—Padua was the first botanic garden of the Western world. It was established in 1545 A.D. and allows a feeling for ancient Italy. The garden itself is a simple design, but is adorned with marble busts, statues and old brick walls in circular patterns. All is surrounded by romantic groves of old trees. The town of Padua is considered by many to be one of the most picturesque cities of upper Italy.

To travel and botanize with these very knowledgeable guides is an opportunity of the first order. This premier visit to Austria, Italy and Switzerland should be a memorable experience for all and a special tour of many facets offering flowers, art and beauty.

Departure for this inspiring tour is scheduled for June 7, 1986. For more information on this first visit to the Alps and northern Italy, call Assistant Director Andrew Pierce at the Gardens, 575-3751, during work hours.

## Conservatory Guides

Continuing education is a necessary element of the guiding program at Denver Botanic Gardens. Throughout the past few months Conservatory Guides have been enjoying the opportunity to attend classes pertaining to Conservatory tours. These lectures will continue into the new year.

On January 22 the Guides' Tea will be held in the DBG House at 1 p.m. The Gardens' Executive Director Merle Moore will provide a review of his recent trip to Southeast Asia.

The noon meetings with brown bag lunches will be held in February and March in Classroom B.

On February 19 Dr. Moras Shubert will discuss and explain botanical terms frequently used in reference literature. If there are any terms that need clarification, call Phyllis Dill prior to this meeting.

Because the best laid plans often go astray, feedback and evaluation are essential. On March 19 all guides involved in the 1985-86 Conservatory guiding program are encouraged to participate in an evaluation session. Your suggestions are necessary in order to prepare the tours that visitors have come to expect from the Gardens.

Schoolhouse at  
Chatfield  
Arboretum



# CHANGES

Fall  
1985  
Denver Botanic Gardens



*Lucile Downer (far right) leads a group of teachers on a tour through the Conservatory.*

## Planting to Attract Wildlife

**Thursdays, December 5, 12**

(two sessions)

**7 to 9 p.m. Classroom C**

Even the urban dweller can attract wildlife to his yard. If the thought of luring cedar waxwings or cottontail rabbits appeals to you, this two-session course will provide the necessary details. Students will learn what type of vegetation to plant around their homes to provide food sources and cover and nesting materials used by birds will also be discussed. Although this course deals primarily with attracting birds to your garden, other wildlife will be covered as well.

**Instructor:** Tina Jones is a wildlife instructor who teaches at the

University of Colorado and the Denver Museum of Natural History as well as DBG. She is also an avid birder.

**Fee:** \$16 members/\$17.50 non-members

## Coniferous Trees for Denver

**Wednesday, December 11 from 7:15 to 9:15 p.m.**

**and**

**Field Trip on Saturday, December 14 from 9 a.m. to noon (two sessions) Classroom C**

This class will acquaint students with coniferous trees (both deciduous and evergreen) that are hardy to the Denver area. The

majority of these trees are indigenous to the Colorado Rockies, while others are from the eastern United States and western Europe.

Through the use of slides, students will observe approximately 20 species to establish an understanding of their distinguishing characteristics, natural history, culture and landscape value.

**Instructor:** An experienced teacher, Jeffrey Frank studied horticulture at Pennsylvania State University and earned a master's degree in landscape architecture from the University of Virginia. He is presently in private practice in Denver.

**Fee:** \$13 members/\$14 non-members

**Denver Botanic Gardens**  
909 York Street  
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

## Registration Form for Classes and Field Trips

The enclosed check, in the amount of \_\_\_\_\_, is to cover the registration fees for the following classes:

Name and section of classes \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

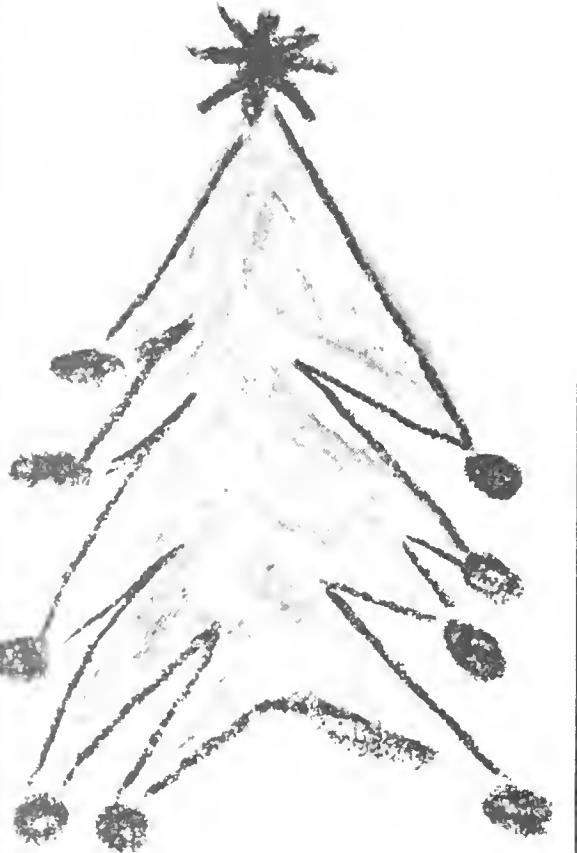
Name \_\_\_\_\_  
Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Tel. No. \_\_\_\_\_ Business Tel. No. \_\_\_\_\_

Member of Denver Botanic Gardens?  Yes  No





### The Great Catnip Chase

(one session) Classroom C

Section I: For children of ages 5-7  
Saturday, December 7  
10 a.m. to noon

Section II: For children of ages 8-11  
Saturday, December 7  
1 to 3 p.m.

Section III: For children of ages 5-7  
Sunday, December 8  
1 to 3 p.m.

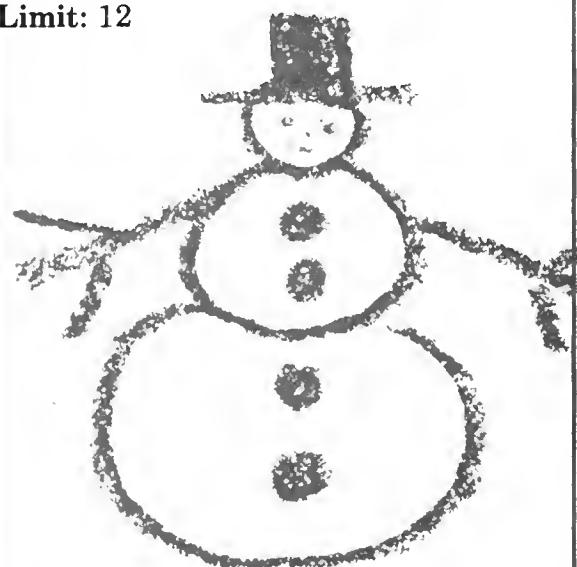
Please indicate your section on the registration form.

Learn about the legends and lore of herbs. Discover how herbs and their flowers are dried, so you can enjoy their sweet smells all winter long. Create your own catnip mouse to tame the most ferocious feline.

Instructor: Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

Fee: \$6.50 members/\$7 non-members

Limit: 12



### Rainbow Eyes

(one session) Classroom A

Section I: For children of ages 5-7  
Saturday, December 14  
10 a.m. to noon

Section II: For children of ages 8-11  
Saturday, December 14  
1 to 3 p.m.

Section III: For children of ages 5-7  
Sunday, December 15  
1 to 3 p.m.

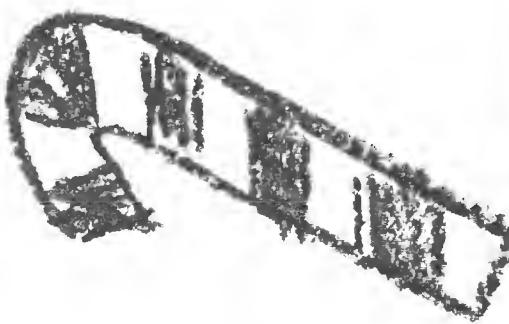
Please indicate your section on the registration form.

See the Gardens through rainbow eyes. Learn how flowers use colors to tempt and tease. Discover how butterflies detect a flower's secret signals. Find out why plants need sunbeams to fuel their green leaf machines. Listen to the tale of the goblins who plotted to steal the rainbow. Make your own rose-colored glasses or a kaleidoscope of sparkling stars.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12



### The Dance of the Sugar Plum Fairies

(one session) Classroom A

Section I: For children of ages 5-7  
Saturday, December 21  
10 a.m. to noon

Section II: For children of ages 8-11  
Saturday, December 21  
1 to 3 p.m.

Section III: For children of ages 5-7  
Sunday, December 22  
1 to 3 p.m.

Please indicate your section on the registration form.

Join the dance of the sugar plum fairies and learn why we decorate with mistletoe and holly for the holidays. Create your own holiday decorations to treasure. Tour the Gardens and enjoy the flowers of winter's light. Taste holiday concoctions from Mother Nature's collection of sugar and spices.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

### Gardening Tips for December

A living plant is a special gift. It symbolizes growth in love and friendship, a healthy future after illness, continuation of life beyond grief. It may also convey a wish to share the joy of holiday spirits. How fortunate that so many of our holidays lie within the somber months of winter and nature's pre-springtime pall, at a time when a blooming plant is a welcome harbinger of seasons to come.

Some of these plants can easily be grown to become permanent remembrances of their givers; others present more challenge. The following is a discussion of some of the more common flowering gift plants and some suggestions for their care.

**Chrysanthemums:** Once this versatile plant was selected only for autumnal decoration; now it is sold the year around to grace any occasion. Inexpensive and available in any color except blue, mums are always a suitable gift.

Unfortunately the pot mums produced for coffee tables make poor "houseplants," and are even less suited for growing in our climate. Their ancestry is far different from the cushion mums you may grow successfully in your perennial border and, while bred solely for their magnificent flowers, little research has gone into ensuring their reliability.

Are they "hardy"? Yes, most of them will endure the cold temperatures of Colorado winters, but their natural season of bloom is usually in late October, November or even December. This means that frost will cut down their blossoms while still in the bud state and seldom, if ever, will they reward you with a replay of their original splendor.

If you happen to be a dedicated greenhouse gardener, you may find it feasible to accept the challenge. If you receive your chrysanthemum in fall or winter, allow it to finish blooming; then cut the stems back to within a few inches of soil level, set it in a cool, bright place and water only often enough to maintain its life. As its natural growing season progresses, increase watering frequency and fertilize regularly. Sometime between late April and June, root two- to three-inch cuttings, discarding the original plant. Plant the rooted cuttings, three to a six-inch pot, pinch out the top inch of stem to encourage more branches and grow them vigorously until they bloom. Without sophisticated chemical and environmental controls, the date of

propagation will control their height and genetics will determine their time of bloom.

Any grower willing to accept the rigors of growing potted chrysanthemum plants from scratch, however, should consider methods to "fool" it into blooming when desired through manipulation of day length. He or she should also investigate the hundreds of varieties available through mail order, many far more interesting and beautiful than the ones commonly offered in flower shops and supermarkets. They can be had for just over a dollar per rooted cutting. This opens up the enticing prospect of growing your very own, entirely different plant for holiday giving.

**Poinsettias:** Due to a more extensive program described just a year ago in these pages, we will only provide a brief outline for bringing these popular Christmas plants back into bloom. Grow as any other houseplant until July, then prune back severely to within several inches of the top of the soil. Grow with plentiful water, sunshine and fertilizer until mid-October, at which time begin keeping the plant in absolute darkness for 14 hours. Provide it with regular sun exposure during the day. It should color by late November and last well through the mid-winter holidays.

**Cyclamens:** While in bloom this delicate looking native of the Middle East thrives only under cool, bright and moist conditions. During the summer and fall it prefers a completely dry dormancy during which its corm, or "bulb," can be stored unpotted in any convenient out-of-the-way place.

Repot this corm, right-side-up, at the end of winter and coax it back into active growth in a cool, sunny window (perhaps in a closed off, vacant bedroom). Given intense care the plant, though reputed to be quite difficult, can grow larger and more floriferous each succeeding year if excessive heat during its growing season and excessive water during its dormant season can be avoided.

**Calceolarias:** Pocketbook plants, as these are called, never fail to give pleasure as gift plants. If you are the recipient of one of these touchy, charming plants, enjoy it all the more for the brevity of your pleasure. As an annual, with no hope of recurring flowers by definition, it will soon die and must be thrown away after it fades.



Poinsettias  
from 1984  
Lobby Court  
holiday display

**Amaryllis:** No discussion of plants for giving would be complete without touching upon these dramatic tropical bulbs. If you give one, present it before it has completed its blooming—part of the pleasure of growing an amaryllis is the anticipation of watching the long inflorescence rise from the center of the leaves.

If you receive one, the proper care needed to bring it into flower year after year is relatively simple. After it has bloomed, continue watering and fertilizing the plant in a sunny spot until fall; at this time gradually water less frequently until you stop the practice altogether. This will induce the bulb to go into dormancy, a condition in which you may store it in any convenient,

frost-free place. After three to five months, repot the bulb into a rich, organic soil. Begin watering at this time and place it in a sunny location where it will repeat its cycle.

A brief word about non-tropical spring bulbs: tulips, crocus and narcissus make lovely gift plants in late winter, awakening in their recipient the excitement of spring during a time of year when it is most welcome. They should be given active growth until their foliage dies down, then planted outdoors in their proper locations, where they can be enjoyed as heralds of springtime.

Larry Latta  
Botanist Horticulturist  
at Denver Botanic Gardens.

C

Regular Meetings  
of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

*African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months*

A

L

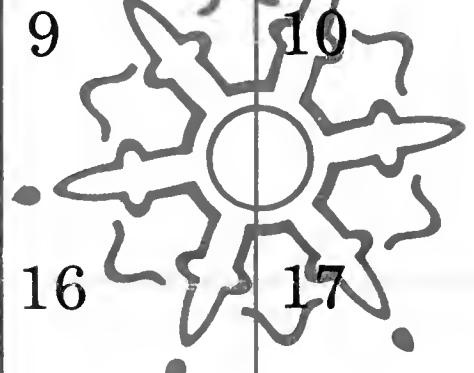
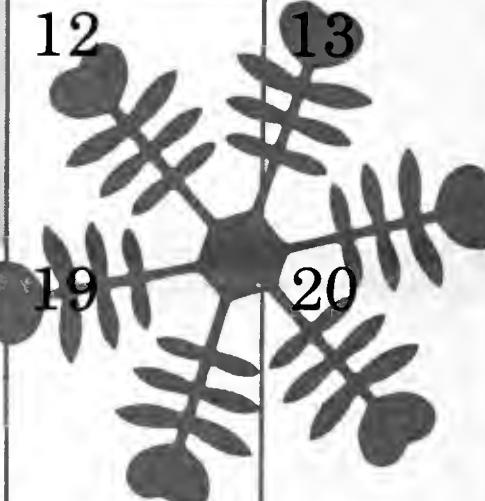
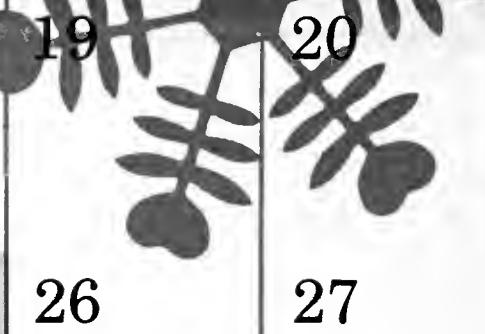
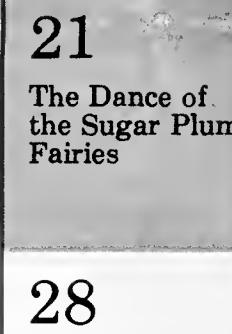
E

N

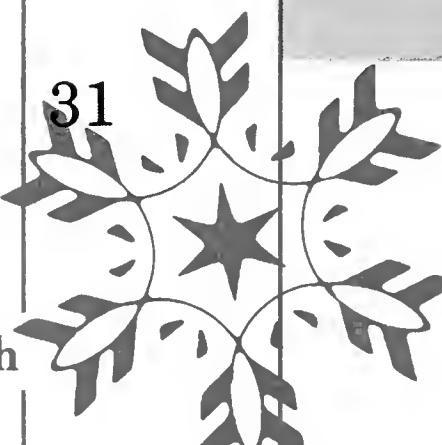
D

A

R

S  
1M  
2T  
3W  
4T  
5F  
6S  
78  
The Great Catnip Chase15  
Herald the Season, Rainbow Eyes16  
2317  
2411  
Coniferous Trees for Denver18  
25  
Christmas Gardens closed all day19  
20  
26  
2714  
Rainbow Eyes  
21  
The Dance of the Sugar Plum Fairies

28

22  
The Dance of the Sugar Plum Fairies29  
30

31

## Coming Next Month

January 1  
New Years Day  
Gardens closed  
all dayJanuary 22  
Guides' Tea

## Denver Botanic Gardens, Inc.

909 York Street  
Denver, Colorado 80206  
303-575-3751

Non Profit Org.  
U.S. Postage  
PAID  
Permit No. 205  
Denver, CO

## December 1985

## TIME VALUE

Address correction requested

